aiwa

aiwa SERVICE

HV-MX100

VIDEO CASSETTE RECORDER

- BASIC VIDEO MECHANISM: TN6500 M4 ERH232S
- TYPE: B,HD

SERVICE MANUAL

S/M Code No. 09–988–300–20A

ELECTRICAL MAIN PARTS LIST - 1 / 13

NOTE: The characters in the suffix column indicate the part usage.

B .....................OO.................................A..................
HDNM ..................XX.................................B..................

REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	AB..................
C 1	87-A10-374-010	1A	CAP,M/P 0.1-275 K RMR	AB..................
C 2	87-A10-480-090		CAP,CER 4700P-250 M E KH	AB..................
C 4	87-A10-480-090		CAP,CER 4700P-250 M E KH	AB..................
C 7	87-A10-480-090		CAP,CER 4700P-250 M E KH	AB..................
C 3	87-A10-480-090		CAP,CER 4700P-250 M E KH	AB..................
C 6	87-A10-480-090		CAP,CER 4700P-250 M E KH	AB..................
C 9	87-A10-490-080		CAP,M/P 0.022-630 K MMC	AB..................
C 8	87-A10-648-090		CAP,E 150-400 SMH	AB..................
C 19	87-010-101-080	0E	CAP, ELECT 220-16	AB..................
C 14	87-010-221-080	0E	CAP, ELECT 470-10V	AB..................
C 18	87-010-387-080	1A	CAP,E 470-25 SME	AB..................
C 16	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C 10	87-016-501-080		CAP,E 47-35 SXE	AB..................
C 17	87-A10-494-090		CAP,E 2200-25 KMF	AB..................
C 13	87-A10-890-080		CAP,CER 330P-2K K B	AB..................
C 26	87-010-190-080		S CHIP F 0.01	AB..................
C 21	87-010-247-080		CAP, ELECT 100-50V	AB..................
C 23	87-010-381-080	0E	CAP, ELECT 330-16V	AB..................
C 20	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C 22	87-A10-492-090		CAP,E 3300-10 KMF	AB..................
C 35	87-010-190-080		S CHIP F 0.01	AB..................
C 33	87-A10-374-010	1A	CAP,M/P 0.1-275 K RMR	AB..................
D 7	87-017-105-080		ZENER,HZS7A3	AB..................
D 5	87-020-465-080	0E	DIODE,1SS133 (110MA)	AB..................
D 1	87-070-173-010	1A	DIODE,S1WBA60	AB..................
D 3	87-A40-172-080		DIODE,EG01Z	AB..................
D 4	87-A40-367-080		DIODE,EU01	AB..................
D 8	87-A40-367-080		DIODE,EU01	AB..................
D 2	87-A40-368-080	0E	DIODE,EG01C	AB..................
D 15	87-020-465-080	0E	DIODE,1SS133 (110MA)	AB..................
D 13	87-020-465-080	0E	DIODE,1SS133 (110MA)	AB..................
D 17	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D 12	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D 14	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D 19	87-A40-367-080		DIODE,EU01	AB..................
D 10	87-A40-367-080		DIODE,EU01	AB..................
D 11	87-A40-369-090	1A	DIODE,RN3Z	AB..................
D 13	87-A40-470-080	0E	DIODE,1SS254	A...................
D 15	87-A40-470-080	0E	DIODE,1SS254	A...................
D 22	87-020-465-080	0E	DIODE,1SS133 (110MA)	AB..................
D 20	87-A40-322-060		DIODE,RK44(F)	AB..................
D 21	87-A40-353-080		ZENER,HZS33-3	AB..................
F 1	87-035-190-010		FUSE, 2AT	....
F 1	87-035-414-010		FUSE, T2A 250V UL	AB..................
FB 1	87-003-223-080	0E	FERRITE BEAD BL02RN2	AB..................
FC 2	87-A90-505-080	0E	FUSE CLAMP,TP00351-51	AB..................
FC 1	87-A90-505-080	0E	FUSE CLAMP,TP00351-51	AB..................
IC 3	87-A20-389-010		IC,NJM7809FA	AB..................
IC 4	87-A20-649-080	1A	IC,HA17431VP	AB..................
IC 1	87-A20-969-010		IC,STR-F6653	AB..................
ICF 2	87-001-132-080		ICP-N38	AB..................
ICF 1	87-001-132-080		ICP-N38	AB..................
ICF 3	87-001-196-080		FUSE, ICP-N10	AB..................
J 1	87-A60-021-010	1A	JACK,AC E HJC-028	AB..................
J 1	87-A60-286-010		JACK,AC U	....
L 2	87-A50-180-080	0E	COIL,22UH K LHL10	AB..................
L 1	87-A50-193-080		COIL,10UH K LHL10	AB..................
LF 3	87-A90-492-010		FLTR,18MH SS10V-05180	AB..................
LF 1	87-A90-492-010		FLTR,18MH SS10V-05180	AB..................
PS 1	87-A90-717-010	1A	P-COUPLER,PC123FY2	AB..................
PT 1	87-JUT-639-010		PT, 7JU-T SWT	AB..................
Q 4	87-026-245-080	0E	TR,DTC114ES	AB..................
Q 3	87-026-245-080	0E	TR,DTC114ES	AB..................
Q 2	87-A30-211-080		TR,2SB1592R	AB..................
Q 1	89-207-334-080		TR,2SB733U4	AB..................
R 1	87-023-102-080		RES,SD 4.7M 1/2W SF	....
R 2	87-A00-252-090		RES,M/F 33K-2W J	AB..................
R 3	87-A00-252-090		RES,M/F 33K-2W J	AB..................
R 6	87-A00-399-090		RES,M/F 68K-3W J	AB..................
R 11	87-A00-400-090		RES,M/F 0.36-2W J	AB..................
R 24	87-025-356-080		RES,M/F 120-1/6W	AB..................
R 25	87-025-365-080		RES,M/F 680-1/6WJ F	AB..................
R 26	87-025-365-080		RES,M/F 680-1/6WJ F	AB..................
R 40	87-029-115-010		FUSE RESISTER 10 OHM 1/4W	AB..................
R 42	87-029-132-090		RESTOR FUSE 4.7-1/4W	AB..................
R 41	87-029-374-010		RES,FUSE 47-1/4W	AB..................
	85-JPK-607-010	2A	SENSOR,DEW S10R4	AB..................
C 1166	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
C 1168	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
C 1162	87-015-696-080		CAP,E 2.2-50 7L	AB..................
C 1176	87-010-498-040	0E	CAP,E 10-16 GAS	AB..................
C 1177	87-010-498-040	0E	CAP,E 10-16 GAS	AB..................
C 1172	87-010-498-040	0E	CAP,E 10-16 GAS	AB..................

C	1175	87-010-499-040		CAP,E 22-6.3 GAS	AB..................
C	1170	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
C	1174	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
C	1206	87-010-079-080	0E	100UF,6.3V ELECTROLYTIC	AB..................
C	1219	87-010-311-080	0E	CAP 12P	AB..................
C	1216	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
C	1218	87-010-805-080	0E	CAP, S 1-16	AB..................
C	1217	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	AB..................
C	1225	87-010-187-080	0E	CAP CHIP S5600P	AB..................
C	1223	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1220	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	1229	87-010-499-040		CAP,E 22-6.3 GAS	AB..................
C	1224	87-016-289-080		C-CAP,TN 10-6.3 F93	AB..................
C	1239	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	1236	87-010-406-080	0E	CAP, ELECT 22-50	AB..................
C	1243	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1247	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1246	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1241	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1242	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1245	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1240	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	1244	87-016-040-080		CAP,0.047F-5.5FM	AB..................
C	1250	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1259	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1258	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1255	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1251	87-010-384-080	0E	CAP, ELECT 100-25V	AB..................
C	1293	87-010-550-040		CAP,E 100-6.3 GAS	AB..................
D	1204	87-017-073-080		ZENER,HZS3B2	AB..................
D	1207	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1209	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D	1208	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D	1201	87-070-418-010	0E	LED,LN66A	AB..................
D	1202	87-A40-342-010		LED,SIDE-2015BR BLU	AB..................
D	1203	87-A40-342-010		LED,SIDE-2015BR BLU	AB..................
D	1207	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1215	87-017-125-080		ZENER,HZS11B2	AB..................
D	1217	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1218	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1216	87-070-136-080		ZENER,MTZJ5.1B	AB..................
D	1210	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D	1212	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D	1211	87-070-274-080	0E	DIODE,1N4003 SEM	AB..................
D	1217	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1218	87-A40-470-080	0E	DIODE,1SS254	A...................
FB	1201	87-008-372-080		FILTER, EMI BL OIRNI	AB..................
HL	1201	86-JU1-201-010		HLDR,SENSOR A	AB..................
HL	1203	86-JU1-202-010		HLDR,SENSOR B	AB..................
HL	1202	86-JU1-202-010		HLDR,SENSOR B	AB..................
HL	1205	86-JU1-203-010		HLDR,R/S	AB..................
HL	1204	86-JU1-203-010		HLDR,R/S	AB..................
IC	1204	87-002-427-010		IC,BA6209N-	AB..................
IC	1207	87-020-881-080		IC,NJM78L05A	AB..................
IC	1205	87-A20-617-040		C-IC,S-24C02AFJA-TB-01	AB..................
IC	1203	87-A20-676-040		C-IC,S-80827ANNP-EDQ	AB..................
IC	1206	87-A20-799-010		IC,NJU3719L	AB..................
IC	1202	87-A20-800-040		C-IC,NJU3718G-T2	AB..................
IC	1201	87-JUT-651-010	2P	C-IC,CXP88860-123Q	....
IC	1201	87-JUT-652-010		C-IC,CXP88860-125Q	....
IC	1201	87-JUT-653-010		C-IC,CXP88860-124Q	AB..................
L	1204	87-005-684-080		COIL,10UH	AB..................
L	1213	87-005-684-080		COIL,10UH	AB..................
Q	1207	87-026-697-010		P-TR,PN168	AB..................
Q	1209	87-026-697-010		P-TR,PN168	AB..................
Q	1202	87-A30-141-010	0E	P-TR,PN268NC-R	AB..................
Q	1204	87-A30-141-010	0E	P-TR,PN268NC-R	AB..................
Q	1205	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1203	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1206	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1208	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1201	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1215	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	1213	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	1212	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	1211	87-A30-218-080		TR,2SB1237(Q)	AB..................
Q	1214	89-112-965-080	0E	TR,2SA1296 (0.75W)	AB..................
Q	1216	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1210	89-324-122-080	0E	TR,2SC2412K	AB..................
R	1257	87-A00-397-090		RES,FUSE 1.8-1/4W J	AB..................
S	1202	87-A90-083-010		SW,PUSH MPU10480 MLB	AB..................
S	1201	87-A90-083-010		SW,PUSH MPU10480 MLB	AB..................
X	1201	85-JU2-643-080		VIB,XTAL 16.00MHZ	AB..................
X	1202	87-030-364-010		VIB,XTAL 32.768K CT	AB..................
C	802	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	804	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	807	87-010-408-080	0E	CAP, ELECT 47-50V	AB..................
C	817	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	814	87-010-546-080		CAP, ELECT 0.33-50V	AB..................
C	829	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	825	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	829	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................

C	821	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	824	87-012-361-080		C-CAP,S 0.056-25 Y	.B..................
C	828	87-012-361-080		C-CAP,S 0.056-25 Y	.B..................
C	837	87-010-320-080	0E	CHIP CAP 68P	AB..................
C	848	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	849	87-010-248-080	0E	CAP, ELECT 220-10V	.B..................
C	849	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	847	87-010-404-080	0E	CAP, ELECT 4.7-50V	AB..................
C	841	87-012-157-080	0E	C-CAP,S 330P-50 CH	AB..................
C	845	87-012-368-080	0E	C-CAP,S 0.1-50 F	AB..................
C	857	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	850	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	855	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	852	87-010-404-080	0E	CAP, ELECT 4.7-50V	AB..................
C	854	87-010-404-080	0E	CAP, ELECT 4.7-50V	AB..................
C	859	87-010-546-080		CAP, ELECT 0.33-50V	AB..................
C	865	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	869	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	860	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	864	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	861	87-012-368-080	0E	C-CAP,S 0.1-50 F	AB..................
C	871	87-010-805-080	0E	CAP, S 1-16	AB..................
C	870	87-010-805-080	0E	CAP, S 1-16	AB..................
C	880	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
D	802	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	804	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	806	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	804	87-A40-470-080	0E	DIODE,1SS254	A...................
D	802	87-A40-470-080	0E	DIODE,1SS254	A...................
D	806	87-A40-470-080	0E	DIODE,1SS254	A...................
IC	802	87-A20-371-080		IC,KA33V	AB..................
IC	801	87-A20-652-010		IC,SBX1837-01	....
L	808	87-005-432-080		COIL,10UH	AB..................
L	802	87-005-432-080		COIL,10UH	AB..................
L	806	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	807	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	801	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	805	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	803	87-005-460-080		COIL,2200UHFLR50,K	.B..................
L	804	87-005-460-080		COIL,2200UHFLR50,K	.B..................
L	809	87-005-696-080		COIL,100UH	AB..................
L	812	87-005-444-080	0E	COIL 100UH,K	AB..................
L	810	87-005-687-080		COIL 18UH	AB..................
L	811	87-005-700-080		COIL,220UH	AB..................
Q	802	89-109-521-080	0E	TR,2SA952 (0.6W)	AB..................
Q	804	89-112-965-080	0E	TR,2SA1296 (0.75W)	AB..................
Q	815	89-109-521-080	0E	TR,2SA952 (0.6W)	AB..................
Q	811	89-109-521-080	0E	TR,2SA952 (0.6W)	AB..................
Q	817	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	819	89-112-965-080	0E	TR,2SA1296 (0.75W)	AB..................
Q	822	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	820	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	823	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	821	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	829	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	828	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	832	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	833	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	836	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	830	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	831	89-324-122-080	0E	TR,2SC2412K	AB..................
S	803	87-036-425-010		SW,SL SSSF123-S06N1	AB..................
S	802	87-A90-875-010		SW,SL 2-2-2 SSSF122-S06N1	AB..................
S	801	87-A90-876-010		SW,SL 1-1-3 SSSF113-S06N1	AB..................
SFR	801	87-024-433-080	0E	SFR,10K RH063EC	AB..................
TU	802	87-JUP-647-010		TU UNIT, TMUG3-301A G/K/I	AB..................
TU	801	87-JUT-656-010		TU UNIT, NJH3091U	....
TU	801	87-JUT-659-010		TU UNIT,TMLJ2	AB..................
C	302	87-010-194-080	0E	CAP, CHIP 0.047	AB..................
C	303	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	308	87-010-317-080	0E	C-CAP,S 39P-50 CH	AB..................
C	307	87-010-317-080	0E	C-CAP,S 39P-50 CH	AB..................
C	306	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	315	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	319	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	310	87-012-158-080	0E	C-CAP,S 390P-50 CH	AB..................
C	321	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
C	325	87-012-157-080	0E	C-CAP,S 330P-50 CH	AB..................
C	327	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	AB..................
C	338	87-010-194-080	0E	CAP, CHIP 0.047	AB..................
C	333	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	330	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	345	87-010-194-080	0E	CAP, CHIP 0.047	AB..................
C	349	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	341	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	344	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	354	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	351	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	352	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	356	87-012-153-080		C-CAP,S 120P-50 CH	AB..................
C	350	87-012-155-080	0E	C-CAP 180P-50CH	AB..................
C	353	87-012-155-080	0E	C-CAP 180P-50CH	AB..................

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C	372	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	375	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	373	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	377	87-010-318-080	0E	C-CAP,S 47P-50 CH	AB..................
C	385	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	384	87-010-315-080	0E	C-CAP,S 27P-50 CH	AB..................
C	382	87-010-318-080	0E	C-CAP,S 47P-50 CH	AB..................
C	387	87-010-320-080	0E	CHIP CAP 68P	AB..................
C	380	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	383	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	381	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	391	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	394	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	398	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	393	87-012-154-080	0E	C-CAP,S 150P-50 CH	AB..................
C	395	87-015-677-080	0E	CAP,E 100-6.3 7L	AB..................
C	403	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	415	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	417	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	413	87-012-156-080	0E	C-CAP,S 220P-50 CH	AB..................
C	423	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
C	902	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	904	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16	AB..................
C	914	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	917	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	919	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	915	87-010-311-080	0E	CAP 12P	AB..................
C	921	87-010-176-080	0E	C-CAP,S 680P-50 SL	AB..................
C	924	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	928	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	922	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	926	87-010-320-080	0E	CHIP CAP 68P	AB..................
C	925	87-010-400-080	0E	CAP, ELECT 0.47-50V	AB..................
C	929	87-012-154-080	0E	C-CAP,S 150P-50 CH	AB..................
C	920	87-012-156-080	0E	C-CAP,S 220P-50 CH	AB..................
C	933	87-010-182-080	0E	C-CAP,S 2200P-50 B	AB..................
C	934	87-010-182-080	0E	C-CAP,S 2200P-50 B	AB..................
C	930	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	931	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	935	87-010-402-080	0E	CAP, ELECT 2.2-50V	AB..................
C	936	87-012-156-080	0E	C-CAP,S 220P-50 CH	AB..................
C	948	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	941	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	942	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	947	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	946	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	954	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	955	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	965	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	963	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	964	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	960	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	961	87-010-545-080	0E	CAP, ELECT 0.22-50V	AB..................
C	962	87-012-153-080		C-CAP,S 120P-50 CH	AB..................
C	976	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	977	87-010-320-080	0E	CHIP CAP 68P	AB..................
C	975	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	978	87-012-156-080	0E	C-CAP,S 220P-50 CH	AB..................
D	303	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	304	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	302	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	303	87-A40-470-080	0E	DIODE,1SS254	A...................
D	302	87-A40-470-080	0E	DIODE,1SS254	A...................
D	304	87-A40-470-080	0E	DIODE,1SS254	A...................
D	901	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	901	87-A40-470-080	0E	DIODE,1SS254	A...................
IC	305	87-002-946-010		IC,MM1111XS	AB..................
IC	304	87-017-768-010		IC,MM1053XS	AB..................
IC	302	87-A20-635-040		C-IC,LC89978M	AB..................
IC	303	87-A20-834-010		IC,LA7337	AB..................
IC	306	87-A20-836-010		IC,MM1118XS	AB..................
IC	301	87-A20-929-010		C-IC,LA71507M	AB..................
L	303	87-005-432-080		COIL,10UH	AB..................
L	305	87-005-432-080		COIL,10UH	AB..................
L	306	87-005-684-080		COIL,10UH	AB..................
L	304	87-005-688-080		COIL,22UH	AB..................
L	307	87-005-696-080		COIL,100UH	AB..................
L	316	87-005-685-080		COIL,12UH	AB..................
L	315	87-005-686-080		COIL,15UH	AB..................
L	314	87-005-686-080		COIL,15UH	AB..................
L	313	87-005-688-080		COIL,22UH	AB..................
L	317	87-005-688-080		COIL,22UH	AB..................
L	310	87-005-690-080		COIL,33UH	AB..................
L	311	87-005-692-080		COIL,47UH	AB..................
L	319	87-005-692-080		COIL,47UH	AB..................
L	318	87-A50-002-080		COIL,270UH J LF5S	AB..................
L	327	87-005-684-080		COIL,10UH	AB..................
L	324	87-005-693-080		COIL,56UH	AB..................
L	901	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	906	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	905	87-005-682-080		COIL,6.8UH J LF5.0S	AB..................
L	909	87-005-684-080		COIL,10UH	AB..................

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L	907	87-005-684-080		COIL,10UH	AB..................
L	908	87-005-684-080		COIL,10UH	AB..................
L	903	87-005-687-080		COIL 18UH	AB..................
L	904	87-005-689-080		COIL,27UH JLF5.0S	AB..................
L	913	87-005-684-080		COIL,10UH	AB..................
L	912	87-005-690-080		COIL,33UH	AB..................
Q	303	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	328	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	329	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	331	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	336	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	339	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	330	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	341	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	342	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	340	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	908	87-026-227-080		CHIP-TR,DTA114EK	AB..................
Q	905	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	904	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	906	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	901	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	907	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	902	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	903	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	914	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	913	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	917	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	918	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	912	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	916	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	919	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	921	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	922	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	920	87-026-211-080	0E	TR,DTA144EK	AB..................
X	301	87-A70-137-080		VIB,XTAL 3.579545MHZ V	AB..................
X	303	87-A70-138-080		VIB,XTAL 3.582056MHZ V	AB..................
X	304	87-A70-139-080		VIB,XTAL 3.575611MHZ V	AB..................
X	302	87-A70-140-080		VIB,XTAL 4.433619MHZ V	AB..................
C	717	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	719	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	718	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	728	87-010-179-080	0E	CAP,CHIP S B1200P	AB..................
C	729	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	726	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	725	87-010-318-080	0E	C-CAP,S 47P-50 CH	AB..................
C	724	87-012-140-080	0E	CAP 470P	AB..................
C	727	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	721	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	720	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	723	87-015-684-080	0E	CAP,E 47-16 7L	AB..................
C	737	87-010-187-080	0E	CAP CHIP S5600P	AB..................
C	731	87-010-187-080	0E	CAP CHIP S5600P	AB..................
C	732	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	739	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	736	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	734	87-010-402-080	0E	CAP, ELECT 2.2-50V	AB..................
C	735	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	733	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	744	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	740	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	748	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	743	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	741	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	742	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	745	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	746	87-012-141-080	0E	CHIP-CAPACITOR,0.22-16F	AB..................
C	752	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	751	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	753	87-012-156-080	0E	C-CAP,S 220P-50 CH	AB..................
C	750	87-015-684-080	0E	CAP,E 47-16 7L	AB..................
IC	702	87-001-854-010		IC,BA7755AF	AB..................
IC	701	87-A20-623-010		C-IC,TDA9602H	AB..................
L	705	85-JU7-631-010		COIL,OSC7 70KHZ	AB..................
L	702	87-005-684-080		COIL,10UH	AB..................
L	704	87-005-684-080		COIL,10UH	AB..................
L	703	87-005-684-080		COIL,10UH	AB..................
Q	701	87-026-235-080		CHIP-TR,DTC114EK	AB..................
Q	703	87-A30-099-080	0E	TR,2SC3708S/T	AB..................
Q	702	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
R	743	87-029-115-010		FUSE RESISTER 10 OHM 1/4W	AB..................
C	1911	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	1915	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1912	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1919	87-015-699-040		CAP,E 10-50 7L	AB..................
C	1921	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	1922	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	1951	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1953	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1959	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
D	1907	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1909	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1905	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................

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D	1908	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1904	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1908	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1904	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1905	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1909	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1907	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1911	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1912	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1918	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1910	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1911	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1910	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1918	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1912	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1943	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1944	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1941	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1942	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1945	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1957	87-017-350-080	0E	LED,SEL1550CM	AB..................
D	1955	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1952	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1954	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1951	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
D	1953	87-A40-266-080		LED,SLH-56VCT31 RED	AB..................
FL	1901	87-JUT-655-010		FL,12-BT-108GK	AB..................
HL	1901	81-DS2-204-210		GUIDE,FL	AB..................
IC	1903	87-070-083-010	1C	IC,GP1U281X	AB..................
IC	1901	87-A20-526-010		C-IC,BU2879AK	AB..................
J	1901	87-A60-369-010		JACK,PIN 3P 15 VT B	AB..................
S	1911	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1931	87-A90-872-110		SW,JOG RJS-Y0001-02	AB..................
S	1953	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1951	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1952	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1956	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1954	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1957	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1955	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
S	1958	87-A90-164-080	0E	SW,TACT SKQAB(N)	AB..................
C	1407	87-010-153-080		C-CAP,S 9P-50 CH	AB..................
C	1401	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	1403	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	1405	87-010-311-080	0E	CAP 12P	AB..................
C	1409	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	1413	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1412	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	1414	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
C	1410	87-010-317-080	0E	C-CAP,S 39P-50 CH	AB..................
C	1419	87-010-805-080	0E	CAP, S 1-16	AB..................
C	1424	87-010-145-080	0E	C-CAP,S 1P-50 CH	AB..................
C	1428	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	1420	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	1426	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	1422	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	1423	87-010-315-080	0E	C-CAP,S 27P-50 CH	AB..................
C	1429	87-010-371-080	0E	CAP, ELECT 470-6.3V	AB..................
C	1427	87-010-384-080	0E	CAP, ELECT 100-25V	AB..................
C	1434	87-010-181-080	0E	CAP,CHIP S 1800P	AB..................
C	1430	87-010-181-080	0E	CAP,CHIP S 1800P	AB..................
C	1439	87-010-181-080	0E	CAP,CHIP S 1800P	AB..................
C	1437	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1433	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1436	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	1432	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	1441	87-010-181-080	0E	CAP,CHIP S 1800P	AB..................
C	1443	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1445	87-010-184-080	0E	CHIP CAPACITOR 3300P(K)	AB..................
C	1447	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1448	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	1449	87-010-498-080		CAP,E 10-16 GAS	AB..................
C	1452	87-010-180-080	0E	C-CER 1500P	AB..................
C	1453	87-010-186-080	0E	CAP,CHIP 4700P	AB..................
C	1450	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	1454	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	1456	87-010-371-080	0E	CAP, ELECT 470-6.3V	AB..................
C	1451	87-010-402-080	0E	CAP, ELECT 2.2-50V	AB..................
C	1467	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	1463	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
C	1465	87-010-319-080	0E	C-CAP,S 56P-50 CH	AB..................
C	1466	87-018-131-080	0E	CAP, CER 1000P-50V	AB..................
D	1406	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1403	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1405	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1404	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1408	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1401	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1402	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1407	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	1408	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1402	87-A40-470-080	0E	DIODE,1SS254	A...................

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D	1406	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1401	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1403	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1404	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1407	87-A40-470-080	0E	DIODE,1SS254	A...................
D	1405	87-A40-470-080	0E	DIODE,1SS254	A...................
IC	1402	87-001-993-010	1B	IC,BA10324	AB..................
IC	1401	87-JU2-660-040		C-IC,LC74761M-9675-TLM	AB..................
J	1401	87-A60-278-010		JACK,PIN 6P YKC21	AB..................
L	1401	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	1405	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	1404	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	1402	87-005-690-080		COIL,33UH	AB..................
L	1406	87-005-692-080		COIL,47UH	AB..................
L	1403	87-005-839-080		COIL,5.6UH G LF5.0S	AB..................
Q	1408	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	1405	87-A30-121-080		TR,DTC 323 TS	AB..................
Q	1406	87-A30-121-080		TR,DTC 323 TS	AB..................
Q	1403	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	1401	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	1402	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	1407	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1409	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	1404	89-324-122-080	0E	TR,2SC2412K	AB..................
X	1401	87-A70-141-080		VIB,XTAL 14.31818MHZ V	AB..................
X	1402	87-A70-142-080		VIB,XTAL 17.734475MHZ V	AB..................
C	452	87-010-071-080		CAP, ELECT 1-50 M 5L SRE	AB..................
C	453	87-010-182-080	0E	C-CAP,S 2200P-50 B	AB..................
C	456	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	458	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	451	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	457	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	468	87-010-079-080	0E	100UF,6.3V ELECTROLYTIC	AB..................
C	460	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	461	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	462	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	469	87-010-805-080	0E	CAP, S 1-16	AB..................
C	478	87-010-071-080		CAP, ELECT 1-50 M 5L SRE	AB..................
C	474	87-010-071-080		CAP, ELECT 1-50 M 5L SRE	AB..................
C	470	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	475	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	473	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	479	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	471	87-010-494-040	0E	CAP,E 1-50 GAS	AB..................
C	472	87-010-494-040	0E	CAP,E 1-50 GAS	AB..................
C	482	87-010-079-080	0E	100UF,6.3V ELECTROLYTIC	AB..................
C	481	87-010-805-080	0E	CAP, S 1-16	AB..................
D	452	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	451	87-020-465-080	0E	DIODE,1SS133 (110MA)	.B..................
D	452	87-A40-470-080	0E	DIODE,1SS254	A...................
D	451	87-A40-470-080	0E	DIODE,1SS254	A...................
IC	451	87-A20-835-010		IC,LA70020	AB..................
L	452	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	454	87-005-440-080	0E	COIL,47UH FLR50	AB..................
Q	452	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	453	89-324-122-080	0E	TR,2SC2412K	AB..................
R	472	87-A00-042-080		C-RES,S 2K-1/10W F	AB..................
C	894	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	893	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	891	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	890	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	895	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	896	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	892	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	898	87-012-140-080	0E	CAP 470P	AB..................
C	897	87-012-140-080	0E	CAP 470P	AB..................
IC	803	87-A20-411-010		IC,TA1230Z	AB..................
X	801	87-A70-056-010		VIB,CER 503KHZ CSB503E7	AB..................
C	104	87-010-132-080		CAP,E 1-50 BP	AB..................
C	102	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	109	87-010-316-080	0E	C-CAP,S 33P-50 CH	AB..................
C	100	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	101	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	103	87-010-402-080	0E	CAP, ELECT 2.2-50V	AB..................
C	112	87-010-154-080	0E	CAP CHIP 10P	AB..................
C	118	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	117	87-010-311-080	0E	CAP 12P	AB..................
C	111	87-012-365-080		C-CAP,S 0.027-25VBK	AB..................
C	114	87-012-365-080		C-CAP,S 0.027-25VBK	AB..................
C	121	87-010-132-080		CAP,E 1-50 BP	AB..................
C	128	87-010-152-080	0E	C-CAP,S 8P-50 CH	AB..................
C	120	87-010-315-080	0E	C-CAP,S 27P-50 CH	AB..................
C	126	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	129	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	124	87-012-365-080		C-CAP,S 0.027-25VBK	AB..................
C	132	87-010-152-080	0E	C-CAP,S 8P-50 CH	AB..................
C	136	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	139	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	142	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	145	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	148	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	169	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................

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C	165	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	163	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	172	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	171	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	170	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	182	87-010-260-080	0E	CAP, ELECT 47-25V	AB..................
C	189	87-010-320-080	0E	CHIP CAP 68P	AB..................
C	180	87-010-384-080	0E	CAP, ELECT 100-25V	AB..................
C	190	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	203	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	208	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	205	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	202	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	210	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	215	87-010-248-080	0E	CAP, ELECT 220-10V	AB..................
C	219	87-010-248-080	0E	CAP, ELECT 220-10V	AB..................
C	217	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	227	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	221	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	222	87-010-405-080	0E	CAP, ELECT 10-50V	AB..................
C	237	87-010-177-080	0E	C-CAP,S 820P-50 SL	AB..................
C	231	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	239	87-012-154-080	0E	C-CAP,S 150P-50 CH	AB..................
C	243	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	240	87-010-194-080	0E	CAP, CHIP 0.047	AB..................
C	248	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	244	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	245	87-010-315-080	0E	C-CAP,S 27P-50 CH	AB..................
C	246	87-010-317-080	0E	C-CAP,S 39P-50 CH	.B..................
C	246	87-010-318-080	0E	C-CAP,S 47P-50 CH	A...................
C	242	87-010-382-080	0E	CAP, ELECT 22-25V	AB..................
C	247	87-010-400-080	0E	CAP, ELECT 0.47-50V	AB..................
C	253	87-010-263-080	0E	CAP, ELECT 100-10V	AB..................
C	250	87-010-313-080	0E	CAP, CHIP 18P	AB..................
C	251	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	259	87-010-374-080	0E	CAP, ELECT 47-10V	AB..................
C	257	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	262	87-010-182-080	0E	C-CAP,S 2200P-50 B	AB..................
C	265	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	266	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	260	87-010-198-080	0E	CAP, CHIP 0.022	AB..................
C	264	87-010-319-080	0E	C-CAP,S 56P-50 CH	AB..................
C	263	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	261	87-010-401-080	0E	CAP, ELECT 1-50V	AB..................
C	290	87-010-805-080	0E	CAP, S 1-16	.B..................
CF	100	87-030-327-010		VIB,CER CSB503F30	AB..................
CN	103	87-099-027-010		CONN,25P 6216 V	AB..................
CN	102	87-099-840-010		CONN,13P 5085 RECE	AB..................
CN	101	87-099-841-010		CONN,15P 5085 RECE	AB..................
CN	100	87-A60-531-010		CONN,5P H BLK 5085 RECE	AB..................
D	200	87-020-027-080		CHIP-DIODE 1SS184	AB..................
DL	101	87-A90-722-010		DELAY LINE,PDL644K1P	AB..................
DL	100	87-A90-723-010		DELAY LINE,PDL634K1M	AB..................
DL	102	87-A90-724-010		DELAY LINE,PDL634K1N	AB..................
FB	101	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	100	87-005-407-080		C-COIL,BLM41A04	AB..................
FU	108	84-JUT-647-010		FLTR,TCV-4236P	AB..................
FU	100	87-JUT-640-010		FLTR,SEC IN	AB..................
FU	101	87-JUT-641-010		FLTR,SEC ID	AB..................
FU	102	87-JUT-642-010		FLTR,B-Y	AB..................
FU	103	87-JUT-643-010		FLTR,R-Y	AB..................
FU	104	87-JUT-644-010		FLTR,358TRAP	AB..................
FU	105	87-JUT-645-010		FLTR,443TRAP	AB..................
FU	106	87-JUT-646-010		FLTR,358BPF	AB..................
FU	107	87-JUT-647-010		FLTR,443BPF	AB..................
FU	200	87-JUT-648-010		FLTR,4MBPF	AB..................
FU	203	87-JUT-648-010		FLTR,4MBPF	AB..................
FU	201	87-JUT-649-010		FLTR,5MLPF	AB..................
FU	202	87-JUT-665-010		FLTR,4MLPF 0.8MS	AB..................
FU	204	87-JUT-666-010		FLTR,BELL	AB..................
IC	101	87-002-273-080		IC,NJM2246M	AB..................
IC	102	87-002-946-010		IC,MM1111XS	AB..................
IC	103	87-A20-366-010		IC,MM1113XS	AB..................
IC	100	87-A20-729-010		C-IC,TA8795BF	AB..................
IC	104	87-A20-923-040		C-IC,HD74HC4052FP	AB..................
IC	200	87-002-946-010		IC,MM1111XS	AB..................
IC	201	87-002-946-010		IC,MM1111XS	AB..................
IC	204	87-017-999-040		IC,BA7046F	AB..................
IC	202	87-A20-730-010		C-IC,M51282FP	AB..................
IC	203	87-JUT-660-040		C-IC,SGH66K 3K	AB..................
IC	290	87-001-795-040		C-IC,TC74HC74AF	.B..................
L	101	87-005-431-080		COIL,8.2UH K FLR50	AB..................
L	102	87-005-435-080		COIL,18UH FLR50	AB..................
L	109	87-005-435-080		COIL,18UH FLR50	AB..................
L	100	87-005-435-080		COIL,18UH FLR50	AB..................
L	107	87-005-438-080	0E	COIL,33UH FLR50	AB..................
L	108	87-005-438-080	0E	COIL,33UH FLR50	AB..................
L	106	87-005-444-080	0E	COIL 100UH,K	AB..................
L	103	87-JUT-661-010		COIL,15.3UH S5LD3	AB..................
L	104	87-JUT-662-010		COIL,6.4UH S5LD3	AB..................
L	105	87-JUT-663-010		COIL,14UH S5LD3	AB..................
L	111	87-005-435-080		COIL,18UH FLR50	AB..................

L	204	87-005-432-080		COIL,10UH	AB..................
L	206	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	205	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	202	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	200	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	201	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	203	87-005-440-080	0E	COIL,47UH FLR50	AB..................
Q	104	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	105	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	205	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	219	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	217	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	218	89-324-122-080	0E	TR,2SC2412K	AB..................
R	254	87-022-358-080		C-RES,S 18K-1/10W F	AB..................
R	280	87-022-355-080		C-RES,S10K-1/10W F	AB..................
R	281	87-022-366-080		C-RES,S 120K-1/10WF	AB..................
SFR	107	87-024-401-080		CHIP SFR 1K RH03A3A	AB..................
SFR	106	87-024-401-080		CHIP SFR 1K RH03A3A	AB..................
SFR	101	87-024-403-080		CHIP SFR 2.2K RH03A3A	AB..................
SFR	102	87-024-403-080		CHIP SFR 2.2K RH03A3A	AB..................
SFR	103	87-024-403-080		CHIP SFR 2.2K RH03A3A	AB..................
SFR	108	87-024-405-080		C-SFR,4.7K RHO3A3A	AB..................
SFR	100	87-024-407-080		CHIP SFR 10K RH03A3A	AB..................
SFR	201	87-024-399-080		CHIP SFR,470 RH3A3A	AB..................
SFR	204	87-024-401-080		CHIP SFR 1K RH03A3A	AB..................
SFR	203	87-024-401-080		CHIP SFR 1K RH03A3A	AB..................
SFR	200	87-024-401-080		CHIP SFR 1K RH03A3A	AB..................
SFR	205	87-024-407-080		CHIP SFR 10K RH03A3A	AB..................
TC	200	87-011-233-080		TRIMER,50P VCT54	AB..................
X	100	87-A70-126-080		VIB,XTAL 3.579545MHZ	AB..................
X	101	87-A70-127-080		VIB,XTAL 3.582056MHZ	AB..................
X	102	87-A70-128-080		VIB,XTAL 3.575611MHZ	AB..................
X	103	87-A70-129-080		VIB,XTAL 4.433619MHZ	AB..................
X	200	87-A70-130-080		VIB,XTAL 4.40625MHZ	AB..................
		87-JUT-204-010		HLDR,DGTL	AB..................
		87-JUT-205-010	0E	HLDR,DGTL-COVER	AB..................
C	505	87-010-321-080	0E	CHIP CAPACITOR,82P(J)	AB..................
C	502	87-015-676-080		ELECTROLYTIC CAPACITOR, 47U-6.	AB..................
C	504	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	519	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	510	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	515	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	518	87-015-676-080		ELECTROLYTIC CAPACITOR, 47U-6.	AB..................
C	512	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	521	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	526	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	527	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	524	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	525	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	520	87-015-676-080		ELECTROLYTIC CAPACITOR, 47U-6.	AB..................
C	522	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	538	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	533	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	531	87-015-684-080	0E	CAP,E 47-16 7L	AB..................
C	540	87-012-141-080	0E	CHIP-CAPACITOR,0.22-16F	AB..................
C	541	87-012-154-080	0E	C-CAP,S 150P-50 CH	AB..................
C	548	87-015-695-080	0E	CAP,E 1-50 7L	AB..................
C	554	87-010-314-080	0E	C-CAP,S 22P-50V	AB..................
C	552	87-012-140-080	0E	CAP 470P	AB..................
C	565	87-010-180-080	0E	C-CER 1500P	AB..................
C	566	87-010-186-080	0E	CAP,CHIP 4700P	AB..................
C	569	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	576	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	578	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	575	87-010-805-080	0E	CAP, S 1-16	AB..................
C	581	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	588	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	585	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	583	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	582	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	589	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	584	87-015-681-080	0E	CAP,E 10-16 7L	AB..................
C	595	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	599	87-010-187-080	0E	CAP CHIP S5600P	AB..................
C	592	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	590	87-010-197-080	0E	CAP, CHIP 0.01 DM	AB..................
C	591	87-010-322-080	0E	C-CAP,S 100P-50 CH	AB..................
C	593	87-015-677-080	0E	CAP,E 100-6.3 7L	AB..................
C	603	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	607	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	601	87-010-178-080	0E	CHIP CAP 1000P	AB..................
C	612	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	614	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	617	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	613	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	618	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	611	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	615	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	619	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	616	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................
C	627	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	AB..................
C	620	87-010-312-080	0E	C-CAP,S 15P-50 CH	AB..................

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C	626	87-010-805-080	0E	CAP, S 1-16	AB..................
C	635	87-015-677-080	0E	CAP,E 100-6.3 7L	AB..................
CN	500	87-099-042-010		CONN,25P H BLK 6216	AB..................
D	501	87-002-635-080		C-ZENER,HZM5.6NB3	AB..................
D	502	87-020-027-080		CHIP-DIODE 1SS184	AB..................
D	500	87-A40-491-080		C-VARI-CAP,HVU363A3TRF	AB..................
FB	509	87-003-350-080		C-F-BEAD,BLM41A01	AB..................
FB	500	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	503	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	507	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	506	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	504	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	502	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	501	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	505	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	508	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	510	87-003-350-080		C-F-BEAD,BLM41A01	AB..................
FB	515	87-003-350-080		C-F-BEAD,BLM41A01	AB..................
FB	514	87-005-407-080		C-COIL,BLM41A04	AB..................
FB	511	87-005-840-080		C-COIL,BLM21A10	AB..................
FB	513	87-005-840-080		C-COIL,BLM21A10	AB..................
FB	512	87-005-840-080		C-COIL,BLM21A10	AB..................
IC	500	84-JUT-653-010		IC,CF45108PJ	AB..................
IC	505	87-001-683-080		IC,TC4S66F	AB..................
IC	501	87-017-837-010		IC,CXK48324Q	AB..................
IC	503	87-017-838-040		C-IC,TLC 5510 I	AB..................
IC	502	87-017-838-040		C-IC,TLC 5510 I	AB..................
IC	508	87-027-842-080		IC,NJM2904M	AB..................
IC	507	87-027-842-080		IC,NJM2904M	AB..................
IC	504	87-027-842-080		IC,NJM2904M	AB..................
IC	509	87-A20-922-040		C-IC,HD74HC00FP	AB..................
IC	506	87-A20-924-040		C-IC,HD74HC4066FP	AB..................
IC	514	87-001-604-080		IC,TC74HCU04F	AB..................
IC	515	87-002-528-080		IC,TC7W04F	AB..................
IC	513	87-027-842-080		IC,NJM2904M	AB..................
IC	510	87-A20-922-040		C-IC,HD74HC00FP	AB..................
IC	512	87-A20-922-040		C-IC,HD74HC00FP	AB..................
IC	511	87-A20-922-040		C-IC,HD74HC00FP	AB..................
L	507	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	508	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	500	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	505	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	506	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	502	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	504	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	503	87-005-440-080	0E	COIL,47UH FLR50	AB..................
L	509	87-JUT-664-080		C-COIL,4.0UH CP4L2	AB..................
Q	504	87-026-211-080	0E	TR,DTA144EK	AB..................
Q	502	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	506	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	508	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	509	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	505	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	507	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	501	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	503	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	516	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	518	87-026-210-080	0E	CHIP-TR,DTC144EK	AB..................
Q	517	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	AB..................
Q	515	89-324-122-080	0E	TR,2SC2412K	AB..................
Q	514	89-324-122-080	0E	TR,2SC2412K	AB..................
SFR	500	87-024-411-080		C-SFR,47K RHO3A3A	AB..................
SFR	501	87-024-411-080		C-SFR,47K RHO3A3A	AB..................
TC	500	87-011-219-080		CAP, TRIMMER 10P	AB..................
X	500	87-A70-131-080		VIB,XTAL 14.328224MHZ	AB..................
X	501	87-A70-132-080		VIB,XTAL 14.302444MHZ	AB..................
X	502	87-A70-133-080		VIB,XTAL 17.734475MHZ	AB..................
X	503	87-A70-134-080		VIB,XTAL 14.31818MHZ	AB..................
X	504	87-A70-135-080		VIB,XTAL 17.71875MHZ	AB..................
		87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	....
C	1	87-A10-374-010	1A	CAP,M/P 0.1-275 K RMR	....
C	7	87-A10-480-090		CAP,CER 4700P-250 M E KH	....
C	3	87-A10-480-090		CAP,CER 4700P-250 M E KH	....
C	4	87-A10-480-090		CAP,CER 4700P-250 M E KH	....
C	2	87-A10-480-090		CAP,CER 4700P-250 M E KH	....
C	6	87-A10-480-090		CAP,CER 4700P-250 M E KH	....
C	9	87-A10-490-080		CAP,M/P 0.022-630 K MMC	....
C	8	87-A10-648-090		CAP,E 150-400 SMH	....
C	19	87-010-101-080	0E	CAP, ELECT 220-16	....
C	14	87-010-221-080	0E	CAP, ELECT 470-10V	....
C	18	87-010-387-080	1A	CAP,E 470-25 SME	....
C	16	87-010-405-080	0E	CAP, ELECT 10-50V	....
C	10	87-016-501-080		CAP,E 47-35 SXE	....
C	17	87-A10-494-090		CAP,E 2200-25 KMF	....
C	13	87-A10-890-080		CAP,CER 330P-2K K B	....
C	26	87-010-190-080		S CHIP F 0.01	....
C	21	87-010-247-080		CAP, ELECT 100-50V	....
C	23	87-010-381-080	0E	CAP, ELECT 330-16V	....
C	20	87-010-401-080	0E	CAP, ELECT 1-50V	....
C	25	87-A10-374-010	1A	CAP,M/P 0.1-275 K RMR	....
C	22	87-A10-492-090		CAP,E 3300-10 KMF	....
C	35	87-010-190-080		S CHIP F 0.01	....

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C	33	87-A10-374-010	1A	CAP,M/P 0.1-275 K RMR
D	7	87-017-105-080		ZENER,HZS7A3
D	5	87-020-465-080	0E	DIODE,1SS133 (110MA)
D	6	87-020-465-080	0E	DIODE,1SS133 (110MA)
D	1	87-070-173-010	1A	DIODE,S1WBA60
D	3	87-A40-172-080		DIODE,EG01Z
D	8	87-A40-367-080		DIODE,EU01
D	4	87-A40-367-080		DIODE,EU01
D	2	87-A40-368-080	0E	DIODE,EG01C
D	15	87-020-465-080	0E	DIODE,1SS133 (110MA)
D	13	87-020-465-080	0E	DIODE,1SS133 (110MA)
D	14	87-070-274-080	0E	DIODE,1N4003 SEM
D	17	87-070-274-080	0E	DIODE,1N4003 SEM
D	12	87-070-274-080	0E	DIODE,1N4003 SEM
D	10	87-A40-367-080		DIODE,EU01
D	19	87-A40-367-080		DIODE,EU01
D	11	87-A40-369-090	1A	DIODE,RN3Z
D	22	87-020-465-080	0E	DIODE,1SS133 (110MA)
D	20	87-A40-322-060		DIODE,RK44(F)
D	21	87-A40-353-080		ZENER,HZS33-3
F	1	87-035-190-010		FUSE, 2AT
FB	1	87-003-223-080	0E	FERRITE BEAD BL02RN2
FC	1	87-A90-505-080	0E	FUSE CLAMP,TP00351-51
FC	2	87-A90-505-080	0E	FUSE CLAMP,TP00351-51
IC	3	87-A20-389-010		IC,NJM7809FA
IC	4	87-A20-649-080	1A	IC,HA17431VP
IC	1	87-A20-969-010		IC,STR-F6653
ICF	1	87-001-132-080		ICP-N38
ICF	2	87-001-132-080		ICP-N38
ICF	3	87-001-196-080		FUSE, ICP-N10
J	1	87-A60-021-010	1A	JACK,AC E HJC-028
L	2	87-A50-180-080	0E	COIL,22UH K LHL10
L	1	87-A50-193-080		COIL,10UH K LHL10
LF	2	87-A90-491-010		FLTR,20UH SU9VD-07020
LF	1	87-A90-492-010		FLTR,18MH SS10V-05180
LF	3	87-A90-492-010		FLTR,18MH SS10V-05180
PS	1	87-A90-717-010	1A	P-COUPLER,PC123FY2
PT	1	87-JUT-639-010		PT, 7JU-T SWT
Q	4	87-026-245-080	0E	TR,DTC114ES
Q	3	87-026-245-080	0E	TR,DTC114ES
Q	2	87-A30-211-080		TR,2SB1592R
Q	1	89-207-334-080		TR,2SB733U4
R	2	87-A00-252-090		RES,M/F 33K-2W J
R	3	87-A00-252-090		RES,M/F 33K-2W J
R	6	87-A00-399-090		RES,M/F 68K-3W J
R	11	87-A00-400-090		RES,M/F 0.36-2W J
R	24	87-025-356-080		RES,M/F 120-1/6W
R	25	87-025-365-080		RES,M/F 680-1/6WJ F
R	26	87-025-365-080		RES,M/F 680-1/6WJ F
R	40	87-029-115-010		FUSE RESISTER 10 OHM 1/4W
R	42	87-029-132-090		RESTOR FUSE 4.7-1/4W
R	41	87-029-374-010		RES,FUSE 47-1/4W
C	807	87-010-382-080	0E	CAP, ELECT 22-25V
C	808	87-010-402-080	0E	CAP, ELECT 2.2-50V
C	809	87-010-402-080	0E	CAP, ELECT 2.2-50V
C	811	87-010-198-080	0E	CAP, CHIP 0.022
C	812	87-010-382-080	0E	CAP, ELECT 22-25V
C	810	87-012-141-080	0E	CHIP-CAPACITOR,0.22-16F
C	816	87-018-134-080	0E	CAPACITOR,TC-U 0.01-16
C	827	87-010-152-080	0E	C-CAP,S 8P-50 CH
C	822	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C	829	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	828	87-010-318-080	0E	C-CAP,S 47P-50 CH
C	826	87-010-320-080	0E	CHIP CAP 68P
C	821	87-010-408-080	0E	CAP, ELECT 47-50V
C	839	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	834	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	835	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	837	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	838	87-010-265-080	0E	CAP, ELECT 33-16V
C	830	87-010-265-080	0E	CAP, ELECT 33-16V
C	833	87-010-319-080	0E	C-CAP,S 56P-50 CH
C	832	87-010-319-080	0E	C-CAP,S 56P-50 CH
C	831	87-010-320-080	0E	CHIP CAP 68P
C	849	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C	847	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C	841	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	840	87-010-263-080	0E	CAP, ELECT 100-10V
C	848	87-010-263-080	0E	CAP, ELECT 100-10V
C	842	87-010-265-080	0E	CAP, ELECT 33-16V
C	843	87-010-265-080	0E	CAP, ELECT 33-16V
C	846	87-010-322-080	0E	C-CAP,S 100P-50 CH
C	859	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C	851	87-010-196-080	0E	CHIP CAPACITOR,0.1-25
C	856	87-010-197-080	0E	CAP, CHIP 0.01 DM
C	850	87-010-263-080	0E	CAP, ELECT 100-10V
C	858	87-010-322-080	0E	C-CAP,S 100P-50 CH
C	852	87-010-322-080	0E	C-CAP,S 100P-50 CH
C	857	87-010-322-080	0E	C-CAP,S 100P-50 CH
C	853	87-010-322-080	0E	C-CAP,S 100P-50 CH
C	855	87-010-408-080	0E	CAP, ELECT 47-50V
C	854	87-012-368-080	0E	C-CAP,S 0.1-50 F

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C	867	87-010-149-080	0E	C-CAP,S 5P-50 CH	....
C	868	87-010-150-080		C-CAP,S 6P-50 CH	....
C	866	87-010-150-080		C-CAP,S 6P-50 CH	....
C	869	87-010-152-080	0E	C-CAP,S 8P-50 CH	....
C	862	87-010-196-080	0E	CHIP CAPACITOR,0.1-25	....
C	861	87-010-263-080	0E	CAP, ELECT 100-10V	....
C	860	87-010-263-080	0E	CAP, ELECT 100-10V	....
C	864	87-010-408-080	0E	CAP, ELECT 47-50V	....
C	863	87-012-368-080	0E	C-CAP,S 0.1-50 F	....
C	872	87-010-149-080	0E	C-CAP,S 5P-50 CH	....
C	871	87-012-148-080		CAP, CHIP S 75 SL	....
C	870	87-012-154-080	0E	C-CAP,S 150P-50 CH	....
C	873	87-016-462-080		C-CAP,S 1-16 F	....
CF	804	87-008-575-080		FLTR,SFSH5.5MCB	....
CF	806	87-008-576-080		FLTR,SFSH6.5MCB	....
CF	802	87-008-577-080		FLTR,TPS5.5MB2	....
CF	805	87-A90-223-080		FLTR, SFSH6.0MCB	....
CF	801	T7-730-049-0A0		FLTR,CER EFCV4045T4	....
D	804	87-020-331-080		CHIP-DIODE,DAN202K	....
D	803	87-020-331-080		CHIP-DIODE,DAN202K	....
D	801	T7-730-049-090		C-DIODE,1SS356	....
D	802	T7-730-049-090		C-DIODE,1SS356	....
IC	802	87-A20-371-080		IC,KA33V	....
IC	801	T7-730-049-050		IC,TDA9818	....
L	802	87-003-105-080		COIL,0.22UH	....
L	809	87-005-432-080		COIL,10UH	....
L	803	87-005-432-080		COIL,10UH	....
L	805	87-005-680-080		COIL,4.7UH J LF5.0S	....
L	804	87-005-683-080		COIL,8.2UH J LF5S	....
L	807	87-005-689-080		COIL,27UH JLF5.0S	....
L	806	87-005-689-080		COIL,27UH JLF5.0S	....
L	808	87-JUT-693-010		COIL,VCO 77.8M	....
L	810	87-005-432-080		COIL,10UH	....
L	811	87-005-440-080	0E	COIL,47UH FLR50	....
L	816	87-005-440-080	0E	COIL,47UH FLR50	....
L	813	87-005-440-080	0E	COIL,47UH FLR50	....
L	814	87-005-440-080	0E	COIL,47UH FLR50	....
L	815	87-005-440-080	0E	COIL,47UH FLR50	....
L	820	87-005-683-080		COIL,8.2UH J LF5S	....
Q	803	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	807	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	808	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	802	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	809	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	804	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	806	89-324-122-080	0E	TR,2SC2412K	....
Q	805	89-324-122-080	0E	TR,2SC2412K	....
Q	801	89-337-794-580		TR,2SC3779 D/E	....
Q	810	87-026-210-080	0E	CHIP-TR,DTC144EK	....
Q	818	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	812	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	819	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	816	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	817	89-324-122-080	0E	TR,2SC2412K	....
Q	815	89-324-122-080	0E	TR,2SC2412K	....
Q	820	89-110-372-080	0E	TR,2SA1037(140MHZ 200MW)	....
Q	821	89-324-122-080	0E	TR,2SC2412K	....
RF	801	87-JUT-691-010		RF MOD UNIT, MDLP3W104X	....
SFR	801	87-024-434-080		SFR,22K RH063EC	....
SFR	802	87-024-434-080		SFR,22K RH063EC	....
SWF	801	T7-730-049-060		FLTR,SAW OFW-K3953M	....
SWF	802	T7-730-049-070		FLTR,SAW OFW-L9353M	....
SWF	803	T7-730-049-080		FLTR,SAW OFW-K9356M	....
TU	801	87-JUT-692-010		TU UNIT, BTP-AD454	....
CN	304	87-099-566-010		CONN,7P TUC-P7P-B1	AB..................
CN	303	87-A60-189-010		CONN,16P V TUC-P16P-B1	AB..................
CN	301	87-A60-386-010		CONN,18P V BLK 5085 PLUG	AB..................
CN	302	87-A60-530-010		CONN,5P V BLK 5085 PLUG	AB..................
CN	1202	81-557-779-010	0E	CONN,2P IL-S	AB..................
CN	1201	86-JU1-657-010		CONN,28P VTR 3MH	AB..................
CN	1203	87-A60-405-010		CONN,4P V BGE TKX-P04P-X1	AB..................
CN	1251	87-099-842-010		CONN,13P 5085 PLUG	AB..................
CN	1252	87-099-843-010		CONN,15 5085 PLUG	AB..................
CN	1271	87-A60-386-010		CONN,18P V BLK 5085 PLUG	AB..................
CN	1281	87-099-021-010		CONN,19P 6216 V	AB..................
CN	1282	87-A60-635-010		CONN,19P 19P-250K-1.25FJNA	AB..................
CN	1291	87-099-019-010		CONN,17P 6216 V	AB..................
CN	1292	87-099-019-010		CONN,17P 6216 V	AB..................
CNA	1200	87-JUT-684-010		CONN ASSY,15P V POWER	AB..................
CN	451	87-A60-183-010		CONN,11P 5083 PLUG	AB..................
CN	452	87-A60-388-010		CONN,18P H BLK 5085 RECE	AB..................
CN	453	87-A60-390-010		CONN,3P H BGE TKX-P03P-A1	AB..................
CN	702	87-099-032-010		CONN,15P 6216 H	AB..................
CN	701	87-A60-388-010		CONN,18P H BLK 5085 RECE	AB..................
CN	804	87-A60-692-010		CONN,13P H BLK TAC-L13P	AB..................
CN	1402	87-099-032-010		CONN,15P 6216 H	AB..................
CN	1404	87-099-555-010		CONN,7P TUC-P	AB..................
CN	1401	87-A60-190-010		CONN,16P H TUC-P16X-B1	AB..................
CN	1403	87-A60-417-010		CONN,21P V BLK 0350535000	AB..................
CN	1902	87-099-034-010		CONN,17P 6216 H	AB..................
CN	1901	87-099-034-010		CONN,17P 6216 H	AB..................
CN	1911	87-099-643-010		CONN,9P P-FJ	AB..................

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CN 1912	87-099-646-010	CONN,9P R-FJ	AB...................
	87-JUT-681-010	FF-CABLE, 25P 1.25 100MM	AB...................
	87-JUT-682-010	FF-CABLE, 17P 1.25 130MM L	AB...................
	87-JUT-683-010	FF-CABLE, 15P 1.25 100MM	AB...................
	87-JUT-686-010	FF-CABLE, 19P 1.25 40MM	AB...................
	87-JUT-687-010	FF-CABLE, 17P 1.25 130MM R	AB...................
CN 1	87-A60-665-010	CONN,15P H WHT 8283	AB...................
CN 801	87-099-021-010	CONN,19P 6216 V	AB...................
CN 802	87-A60-636-010	CONN,19P 19RK-1.25FJN	AB...................
CN 803	87-A60-693-010	CONN,13P V BLK TAC-L13X	AB...................
CN 1	87-A60-665-010	CONN,15P H WHT 8283	....
CN 801	87-099-021-010	CONN,19P 6216 V	....
CN 802	87-A60-636-010	CONN,19P 19RK-1.25FJN	....
CNA 801	87-JUT-690-010	CONN ASSY, RF PIN 7JUT	....

MECHANICAL PARTS LIST - 1 / 1

NOTE: The characters in the suffix column indicate the part usage.

B ......................OO..................................A...................
HDNM ...................XX...................................B..................

REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	82-NE6-067-010	0E	BADGE,AIWA 30N	AB..................
	84-JP9-021-110	0E	PLATE,FOOT HAIR	AB..................
	84-JP9-202-010	0E	SPR-T,DOOR	AB..................
	85-HRE-593-010	0E	3X3X0.35	A...................
	87-JUT-001-010	1H	CABI,FR U	A...................
	87-JUT-001-110		CABI,FR U	.B..................
	87-JUT-004-010		PANEL,FR U	AB..................
	87-JUT-007-010		KEY,POWER	AB..................
	87-JUT-008-010	1A	KEY,CNTRL	A...................
	87-JUT-008-110		KEY,CNTRL	.B..................
	87-JUT-009-010	1B	KEY,SYS-L-ASSY	A...................
	87-JUT-009-110		KEY,SYS-L-ASSY	.B..................
	87-JUT-010-010	1B	KEY,SYS-R-ASSY	A...................
	87-JUT-010-110		KEY,SYS-R-ASSY	.B..................
	87-JUT-013-010		KEY,CHNNL	AB..................
	87-JUT-016-010		WINDOW,DSPLY	AB..................
	87-JUT-019-010	0E	BTN,OTPB	A...................
	87-JUT-019-110		BTN,OTPB	.B..................
	87-JUT-021-010		DOOR,CASS	AB..................
	81-JUK-045-010	0E	FELT,FOOT 8-8	AB..................
	87-JU1-203-110		HLDR,MECHA	AB..................
	87-JUT-003-010		CABI,STEEL	AB..................
	87-JUT-005-010		PANEL,TU	....
	87-JUT-006-010		PANEL,REAR	AB..................
	87-JUT-020-010		PANEL,TU Z	....
	87-JUT-029-010		PANEL,TU J	AB..................
	87-JUT-207-010	1C	FRAME,MECHA	A...................
	87-JUT-017-010		KNOB,RTRY SHTTL	AB..................
	87-JUT-018-010		KNOB,RTRY JOG	AB..................
	87-JUT-202-010		HLDR,PS	AB..................
	87-JUT-203-010		HLDR,PS-COVER	AB..................
	87-067-579-010	0E	TAPPING SCREW, BVT2+3-8	AB..................
	87-067-660-010	0E	TAPPING SCREW, BVT2+3-8	AB..................
	87-067-688-010	0E	BVTT+3-6	AB..................
	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	AB..................
	87-078-180-010		BVT2+3.5-12(BLK)	AB..................
	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	AB..................
	85-JPK-607-010	2A	SENSOR,DEW S10R4	AB..................
	87-JUT-204-010		HLDR,DGTL	AB..................
	87-JUT-205-010		HLDR,DGTL-COVER	AB..................
	87-067-703-010	0E	TAPPING SCREW, BVT2+3-10	....
	87-JUT-681-010		FF-CABLE, 25P 1.25 100MM	AB..................
	87-JUT-682-010		FF-CABLE, 17P 1.25 130MM L	AB..................
	87-JUT-683-010		FF-CABLE, 15P 1.25 100MM	AB..................
	87-JUT-686-010		FF-CABLE, 19P 1.25 40MM	AB..................
	87-JUT-687-010		FF-CABLE, 17P 1.25 130MM R	AB..................

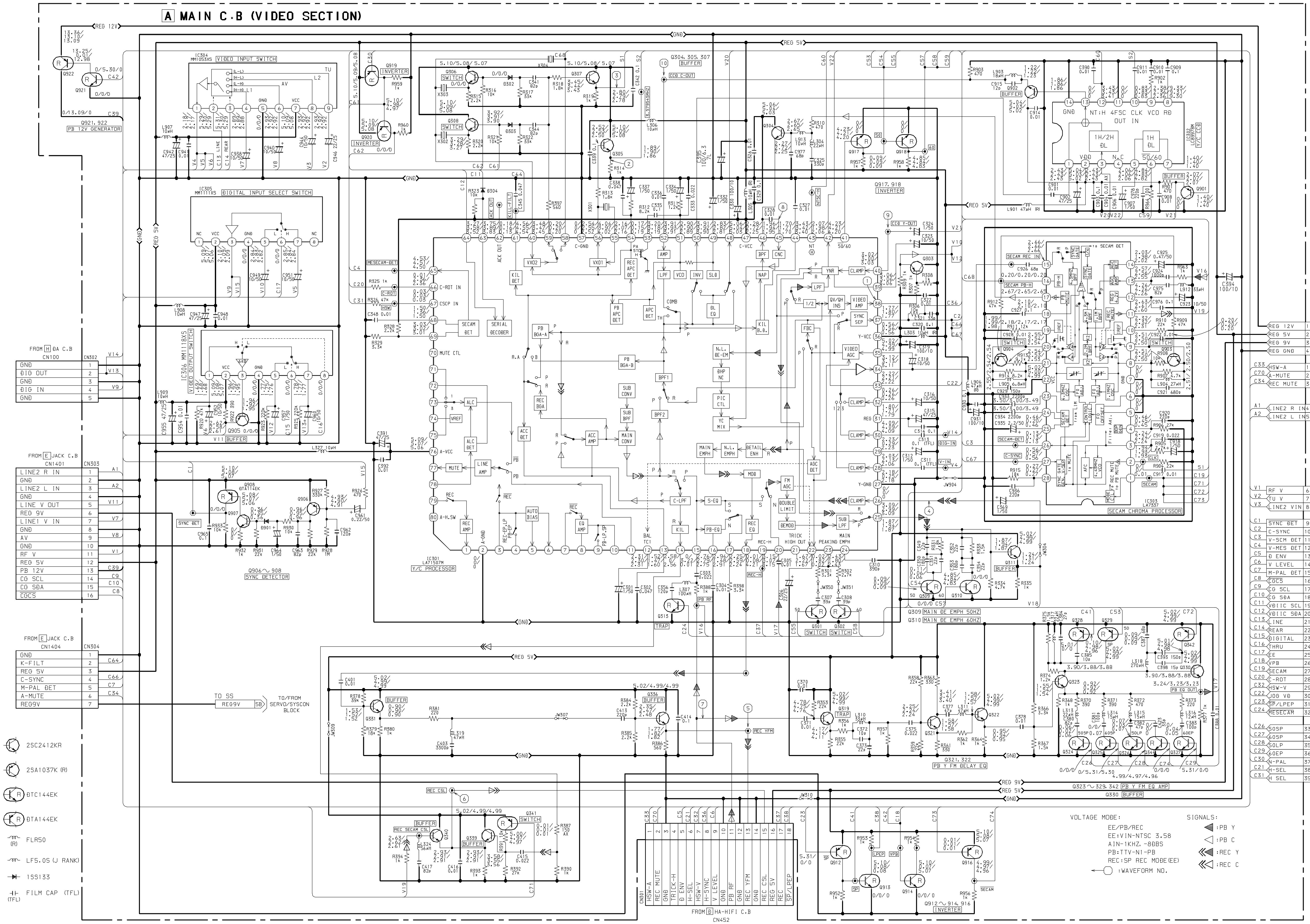
ACCESSORIES / PACKAGE LIST - 1 / 1

NOTE: The characters in the suffix column indicate the part usage.

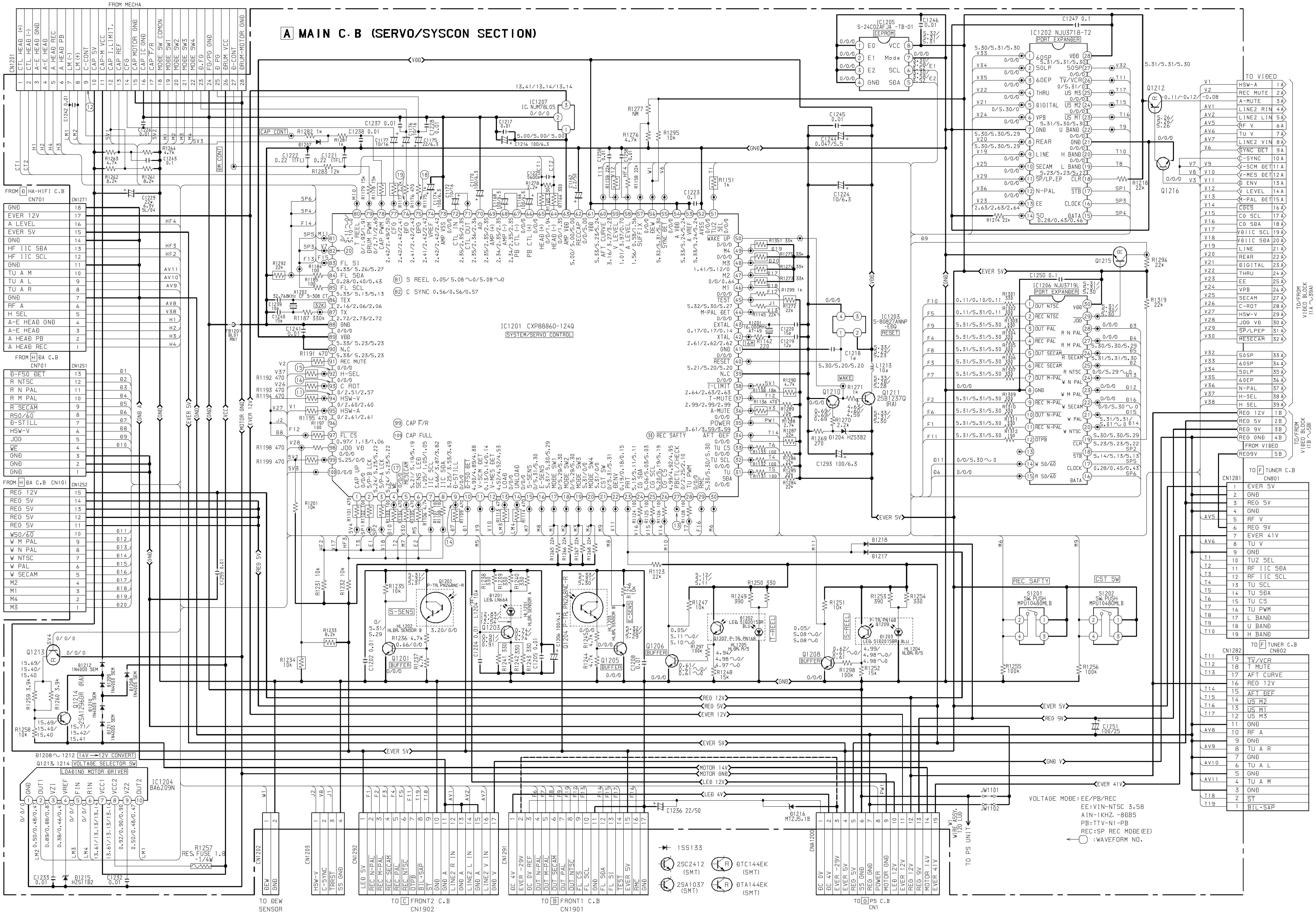
B ......................OO..................................A...................
HDNM ...................XX...................................B..................

REF.NO	PARTS NO.	KANRI NO.	DESCRIPTION	SUFFIX
	87-JUT-901-110		IB,MX100U (ESFP) -M	....
	87-JUT-904-010		IB,MX100 (JE)-M	A...................
	87-JUT-908-010		IB,MX100HD (ESFP) -M	.B..................
	87-034-594-010		AC CORD SET E	.B..................
	87-050-060-010		AC CORD SET ASSY,D	A...................
	87-099-789-010	1B	PLUG,ADPTR IR44	.B..................
	87-A80-013-010		AC CORD AST ASSY,U BLK	....
	87-A90-786-010		PLUG,CONVERSION IR46	A...................
	87-B30-050-010		CORD,RF NTSC/D	AB..................
	87-B30-051-010		CORD,PIN 3P	AB..................
	87-JUT-670-010		RC UNIT,RC-7VR22	AB..................
	87-JUT-675-010		RC UNIT,RC-7VR23	....

SCHEMATIC DIAGRAM – 1 (VIDEO)

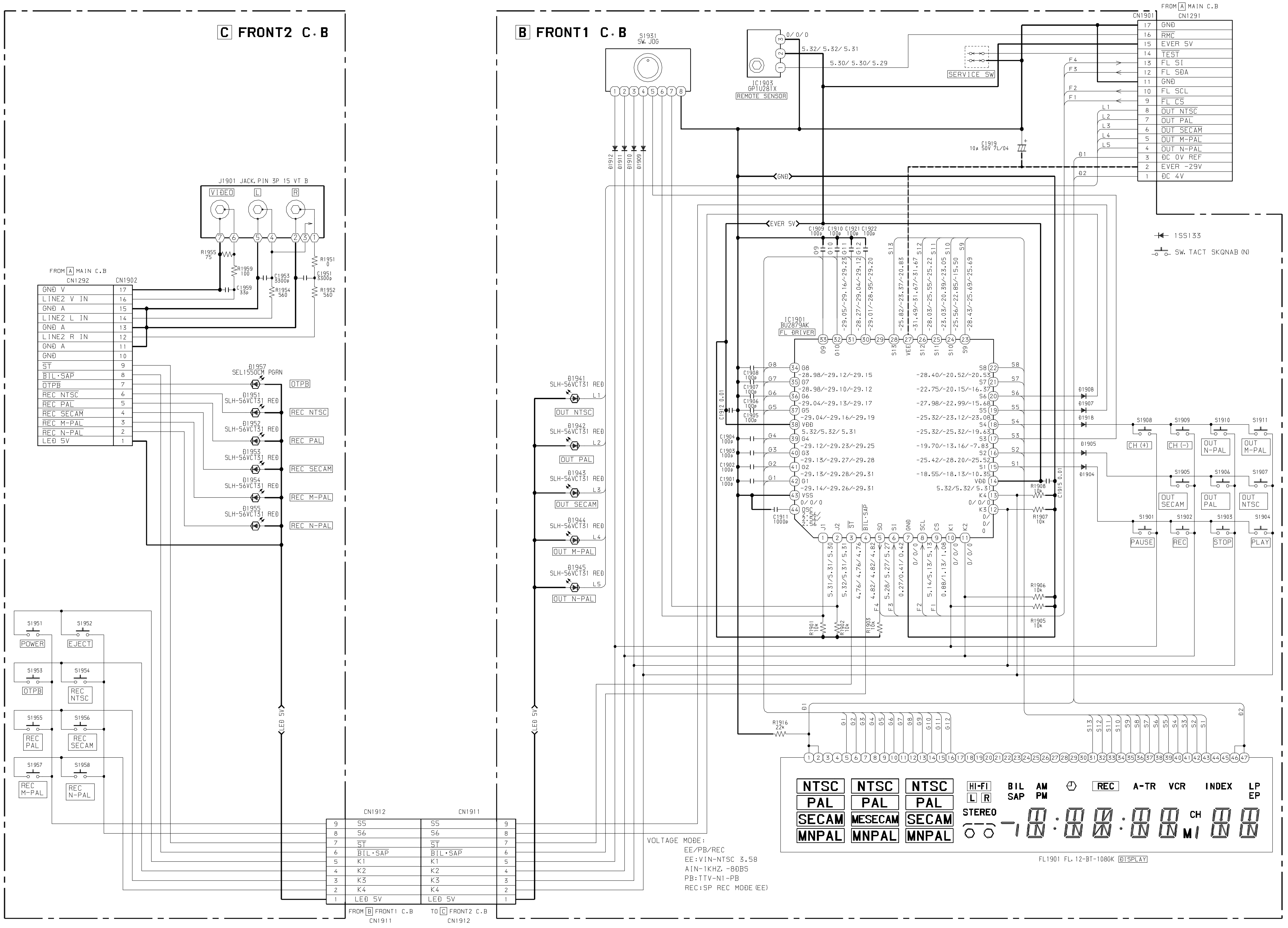

A MAIN C.B (VIDEO SECTION)
IC304 MM1053XS VIDEO INPUT SWITCH
IC305 MM1111XS DIGITAL INPUT SELECT SWITCH
IC306 MM1118XS VIDEO OUTPUT SWITCH
IC301 LA71507M Y/C PROCESSOR
IC302 LC89970M Y/C CCD
IC303 LA7337 SECAM CHROMA PROCESSOR
Q921, 922 PB 12V GENERATOR
Q304, 305, 307 BUFFER
Q917, 918 INVERTER
Q906～908 SYNC DETECTOR
Q309 MAIN DE EMPH 50HZ
Q310 MAIN DE EMPH 60HZ
Q321, 322 PB Y FM DELAY EQ
Q323～329, 342 PB Y FM EQ AMP
Q330 BUFFER
Q912～914, 916 INVERTER
FROM H DA C.B CN302 CN100
GND
DIG OUT
GND
DIG IN
GND
FROM E JACK C.B CN303 CN1401
LINE2 R IN
GND
LINE2 L IN
GND
LINE V OUT
REG 9V
LINE1 V IN
GND
AV
GND
RF V
REG 5V
PB 12V
CG SCL
CG SDA
CGCS
FROM E JACK C.B CN304 CN1404
GND
K-FILT
REG 5V
C-SYNC
M-PAL DET
A-MUTE
REG9V
TO SS REG9V 5B TO/FROM SERVO/SYSCON BLOCK
FROM B HA-HIFI C.B CN452 CN301
HSW-A
REC MUTE
GND
TRICK-H
D ENV
H-SEL
HSW-V
V LEVEL
GND
PB RF
GND
REC YFM
REC CSL
REG 5V
GND
SP/LPEP
TO/FROM SERVO/SYSCON BLOCK (1B～4B)
REG 12V 1B
REG 5V 2B
REG 9V 3B
REG GND 4B
HSW-A 1A
A-MUTE 2A
REC MUTE 3A
LINE2 R IN 4A
LINE2 L IN 5A
TO/FROM SERVO/SYSCON BLOCK (1A～39A)
RF V 6A
TU V 7A
LINE2 VIN 8A
SYNC DET 9A
C-SYNC 10A
V-SCM DET 11A
V-MES DET 12A
D ENV 13A
V LEVEL 14A
M-PAL DET 15A
CGCS 16A
CG SCL 17A
CG SDA 18A
VDIIC SCL 19A
VDIIC SDA 20A
LINE 21A
REAR 22A
DIGITAL 23A
THRU 24A
EE 25A
VPB 26A
SECAM 27A
C-ROT 28A
HSW-V 29A
JOG VD 30A
SP/LPEP 31A
MESECAM 32A
50SP 33A
60SP 34A
50LP 35A
60EP 36A
N-PAL 37A
H-SEL 38A
H SEL 39A
2SC2412KR
2SA1037K (R)
DTC144EK
DTA144EK
FLR50 (R)
LF5.0S (J RANK)
1SS133
FILM CAP (TFL)
VOLTAGE MODE:
EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ, -8DBS
PB:TTV-N1-PB
REC:SP REC MODE(EE)
:WAVEFORM NO.
SIGNALS:
:PB Y
:PB C
:REC Y
:REC C

SCHEMATIC DIAGRAM – 2 (SERVO/SYSCON)



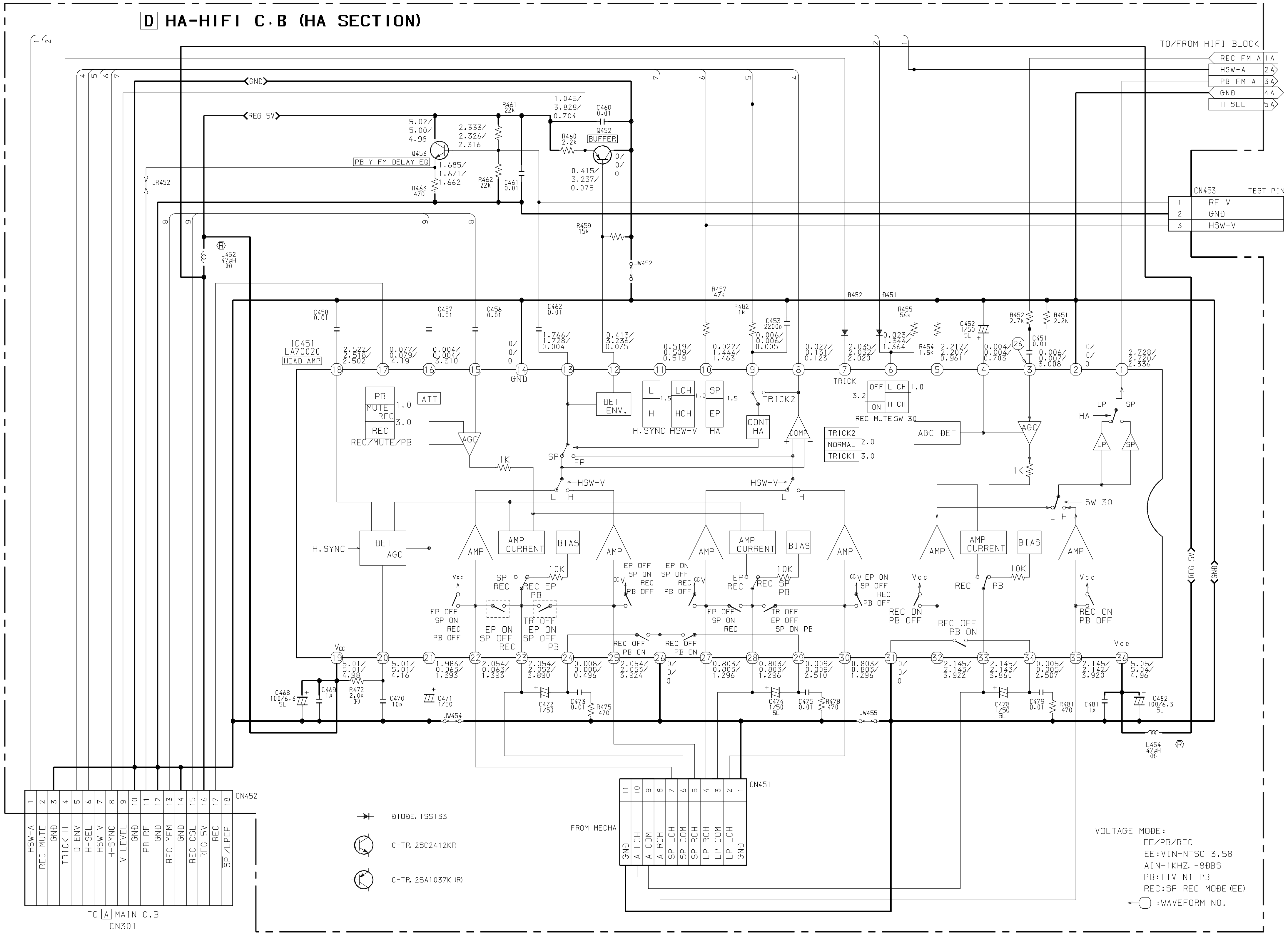
A MAIN C·B (SERVO/SYSCON SECTION)
FROM MECHA
CN1201
FROM D HA-HIFI C.B CN701
FROM H DA C.B CN701
FROM H DA C.B CN101
IC1201 CXP88860-124Q SYSTEM/SERVO CONTROL
IC1202 NJU3718-T2 PORT EXPANDER
IC1205 S-24C02AFJA -TB-01 EEPROM
IC1206 NJU3719L PORT EXPANDER
IC1207 IC.NJM78L05
IC1203 S-80827ANNP-EDQ RESET
IC1204 BA6209N LOADING MOTOR DRIVER
Q1213.1214 VOLTAGE SELECTOR SW
D1208～1212 14V→12V CONVERT
REC SAFTY S1201 SW,PUSH MPU10480MLB
CST SW S1202 SW,PUSH MPU10480MLB
TO VIDEO
TO/FROM VIDEO BLOCK (1A～32A)
TO/FROM VIDEO BLOCK (1B～5B)
TO F TUNER C.B CN801
TO F TUNER C.B CN802
TO DEW SENSOR
TO C FRONT2 C.B CN1902
TO B FRONT1 C.B CN1901
TO G PS C.B CN1
W1 WIRE ASSY, 120 LUG
TO PS UNIT
1SS133
2SC2412 (SMT)
2SA1037 (SMT)
DTC144EK (SMT)
DTA144EK (SMT)
VOLTAGE MODE:EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ, -8DBS
PB:TTV-N1-PB
REC:SP REC MODE(EE)
:WAVEFORM NO.

SCHEMATIC DIAGRAM – 3 (FRONT1,FRONT2)



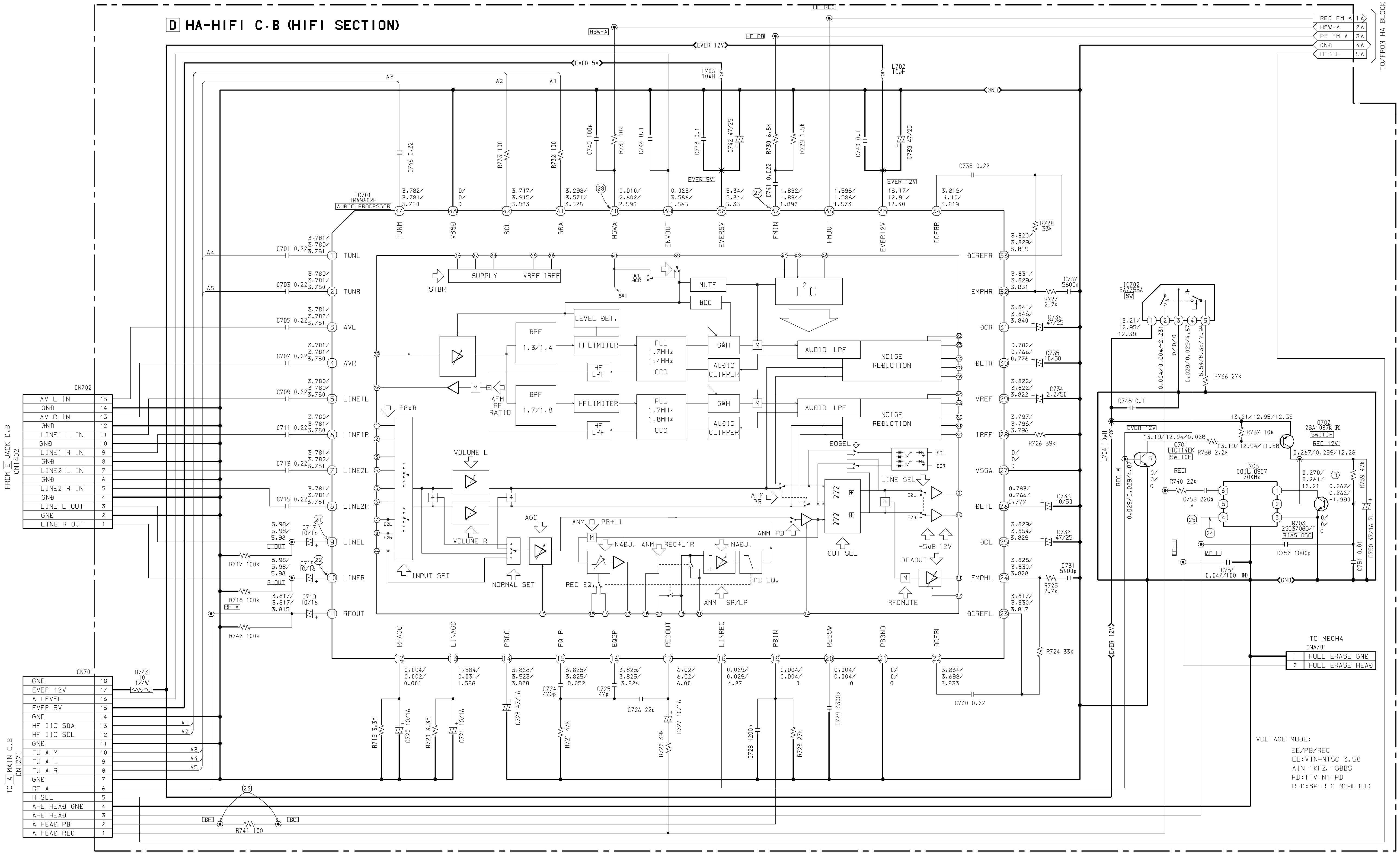
C FRONT2 C.B
B FRONT1 C.B
J1901 JACK,PIN 3P 15 VT B
VIDEO
L
R
R1955 75
R1959 100
C1959 33p
C1953 3300p
R1954 560
R1951 0
C1951 3300p
R1952 560
FROM A MAIN C.B
CN1292
CN1902
GND V
LINE2 V IN
GND A
LINE2 L IN
GND A
LINE2 R IN
GND A
GND
ST
BIL·SAP
OTPB
REC NTSC
REC PAL
REC SECAM
REC M-PAL
REC N-PAL
LED 5V
D1957 SEL1550CM PGRN
OTPB
D1951 SLH-56VCT31 RED
REC NTSC
D1952 SLH-56VCT31 RED
REC PAL
D1953 SLH-56VCT31 RED
REC SECAM
D1954 SLH-56VCT31 RED
REC M-PAL
D1955 SLH-56VCT31 RED
REC N-PAL
S1951 POWER
S1952 EJECT
S1953 OTPB
S1954 REC NTSC
S1955 REC PAL
S1956 REC SECAM
S1957 REC M-PAL
S1958 REC N-PAL
LED 5V
CN1912
CN1911
S5
S6
ST
BIL·SAP
K1
K2
K3
K4
LED 5V
FROM B FRONT1 C.B CN1911
TO C FRONT2 C.B CN1912
S1931 SW.JOG
D1912 D1911 D1910 D1909
IC1903 GP1U281X REMOTE SENSOR
0/0/0
5.32/5.32/5.31
5.30/5.30/5.29
SERVICE SW
FROM A MAIN C.B
CN1901
CN1291
GND
RMC
EVER 5V
TEST
FL SI
FL SDA
GND
FL SCL
FL CS
OUT NTSC
OUT PAL
OUT SECAM
OUT M-PAL
OUT N-PAL
DC 0V REF
EVER -29V
DC 4V
C1919 10μ 50V 7L/04
GND
EVER 5V
C1909 100p C1910 100p C1921 100p C1922 100p
1SS133
SW.TACT SKQNAB (N)
D1941 SLH-56VCT31 RED
OUT NTSC
D1942 SLH-56VCT31 RED
OUT PAL
D1943 SLH-56VCT31 RED
OUT SECAM
D1944 SLH-56VCT31 RED
OUT M-PAL
D1945 SLH-56VCT31 RED
OUT N-PAL
IC1901 BU2879AK FL DRIVER
C1912 0.01
C1915 0.01
C1911 1000p
D1908 D1907 D1918 D1905 D1904
R1908 10k
R1907 10k
R1906 10k
R1905 10k
R1901 10k R1902 10k R1903 10k
R1916 22k
S1908 CH (+)
S1909 CH (−)
S1910 OUT N-PAL
S1911 OUT M-PAL
S1905 OUT SECAM
S1906 OUT PAL
S1907 OUT NTSC
S1901 PAUSE
S1902 REC
S1903 STOP
S1904 PLAY
VOLTAGE MODE:
EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ -8DBS
PB:TTV-N1-PB
REC:SP REC MODE(EE)
NTSC PAL SECAM MNPAL
NTSC PAL MESECAM MNPAL
NTSC PAL SECAM MNPAL
HI-FI L R STEREO
BIL SAP AM PM REC A-TR VCR INDEX LP EP CH
FL1901 FL,12-BT-108GK DISPLAY

SCHEMATIC DIAGRAM – 4 (HA)



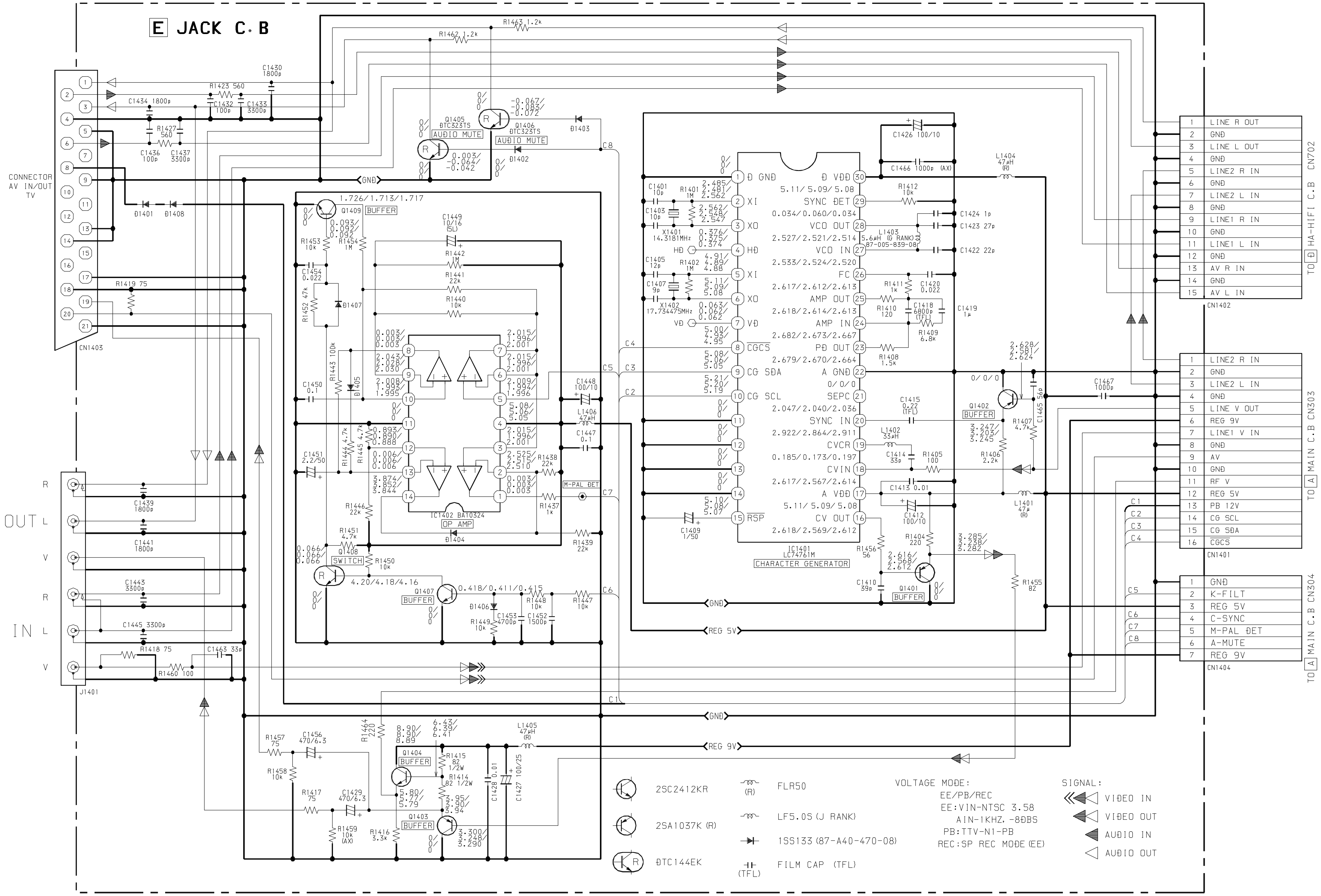
D HA-HIFI C.B (HA SECTION)
TO/FROM HIFI BLOCK
REC FM A 1A
HSW-A 2A
PB FM A 3A
GND 4A
H-SEL 5A
GND
REG 5V
Q453
PB Y FM DELAY EQ
Q452
BUFFER
R461 22k
R460 2.2k
C460 0.01
R462 22k
C461 0.01
R463 470
R459 15k
JR452
JW452
L452 47μH
CN453 TEST PIN
1 RF V
2 GND
3 HSW-V
IC451
LA70020
HEAD AMP
C458 0.01
C457 0.01
C456 0.01
C462 0.01
R457 47k
R482 1k
C453 2200p
D452
D451
R455 56k
C452 1/50 SL
R452 2.7k
R451 2.2k
C451 0.01
R454 1.5k
PB
MUTE
REC
REC
REC/MUTE/PB
ATT
AGC
DET ENV.
H.SYNC
HSW-V
HA
CONT HA
TRICK2
COMP
TRICK
TRICK2
NORMAL
TRICK1
REC MUTE SW 30
AGC DET
SW 30
LP
SP
DET AGC
AMP
AMP CURRENT
BIAS
10K
1K
H.SYNC
REC ON
PB OFF
REC OFF
PB ON
EP ON
SP OFF
EP OFF
SP ON
Vcc
C468 100/6.3 SL
C469 1μ
R472 2.0k
C470 10p
C471 1/50
JW454
C472 1/50
C473 0.01
R475 470
C474 1/50 SL
C475 0.01
R478 470
JW455
C478 1/50 SL
C479 0.01
R481 470
C481 1μ
C482 100/6.3 SL
L454 47μH
CN451
FROM MECHA
GND
A LCH
A COM
A RCH
SP LCH
SP COM
SP RCH
LP RCH
LP COM
LP LCH
GND
CN452
HSW-A
REC MUTE
GND
TRICK-H
D ENV
H-SEL
HSW-V
H-SYNC
V LEVEL
GND
PB RF
GND
REC YFM
GND
REC CSL
REG 5V
REC
SP/LPEP
TO A MAIN C.B
CN301
DIODE, 1SS133
C-TR, 2SC2412KR
C-TR, 2SA1037K (R)
VOLTAGE MODE:
EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ, -8DBS
PB:TTV-N1-PB
REC:SP REC MODE (EE)
:WAVEFORM NO.

SCHEMATIC DIAGRAM – 5 (HI-FI)



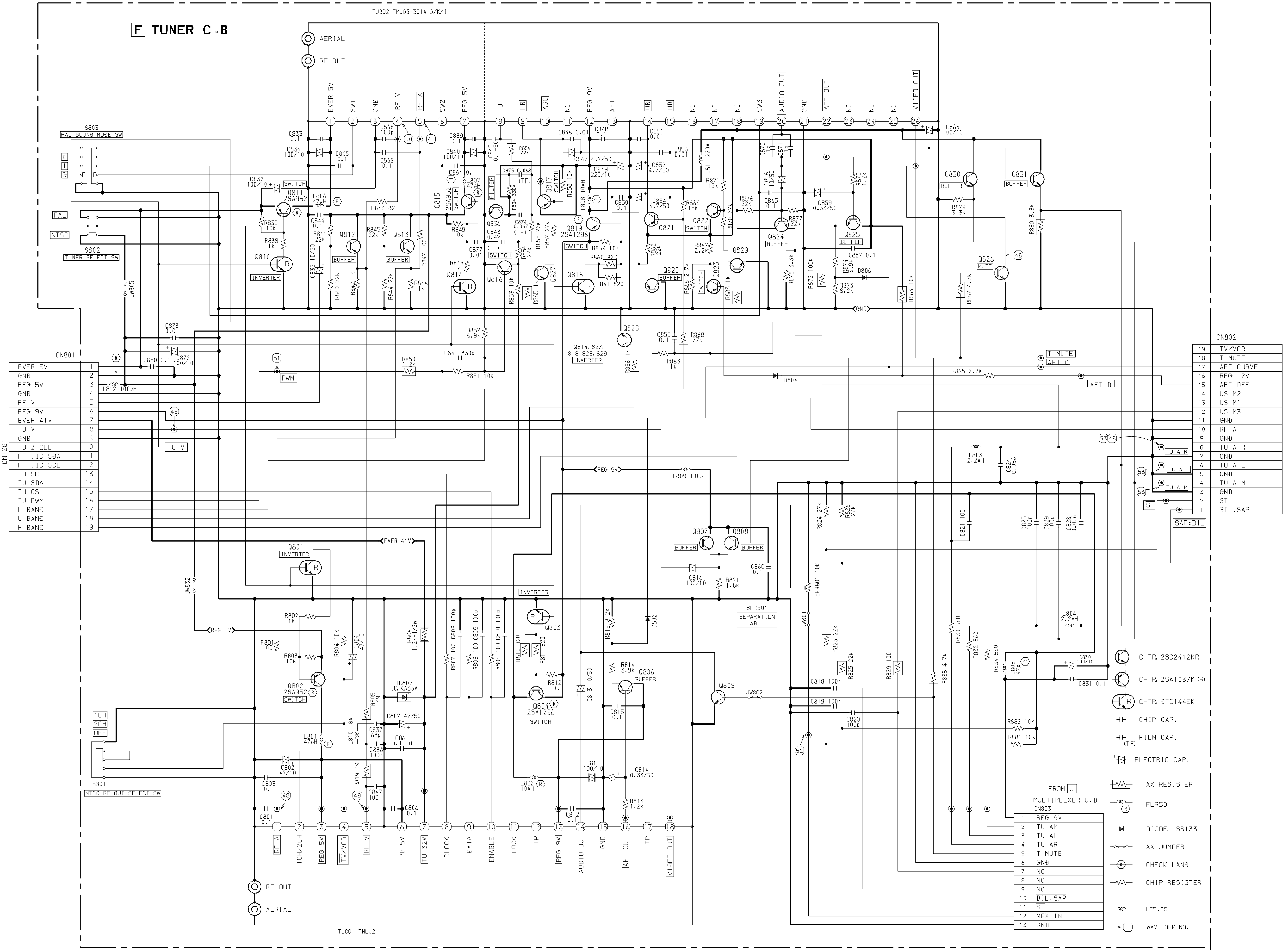
D HA-HIFI C.B (HIFI SECTION)
IC701 TDA9602H AUDIO PROCESSOR
IC702 BA7755A SW
Q701 DTC114EK SWITCH
Q702 2SA1037K (R) SWITCH
Q703 2SC3708S/T BIAS OSC
L705 COIL OSC7 70KHz
L702 10μH
L703 10μH
L704 10μH
CN702
FROM E JACK C.B CN1402
AV L IN
AV R IN
LINE1 L IN
LINE1 R IN
LINE2 L IN
LINE2 R IN
LINE L OUT
LINE R OUT
GND
CN701
TO A MAIN C.B CN1271
EVER 12V
A LEVEL
EVER 5V
HF IIC SDA
HF IIC SCL
TU A M
TU A L
TU A R
RF A
H-SEL
A-E HEAD GND
A-E HEAD
A HEAD PB
A HEAD REC
R743 10 1/4W
R741 100
TO/FROM HA BLOCK
REC FM A
HSW-A
PB FM A
GND
H-SEL
TO MECHA
CNA701
FULL ERASE GND
FULL ERASE HEAD
TUNL
TUNR
AVL
AVR
LINE1L
LINE1R
LINE2L
LINE2R
LINEL
LINER
RFOUT
TUNM
VSSD
SCL
SDA
HSWA
ENVOUT
EVER5V
FMIN
FMOUT
EVER12V
DCFBR
DCREFR
EMPHR
DCR
DETR
VREF
IREF
VSSA
DETL
DCL
EMPHL
DCREFL
RFAGC
LINAGC
PBDC
EQLP
EQSP
RECOUT
LINREC
PBIN
RESSW
PBGND
DCFBL
STBR
SUPPLY
VREF IREF
MUTE
DOC
I²C
LEVEL DET.
BPF 1.3/1.4
BPF 1.7/1.8
HFLIMITER
HF LPF
PLL 1.3MHz 1.4MHz CCO
PLL 1.7MHz 1.8MHz CCO
S&H
AUDIO CLIPPER
AUDIO LPF
NOISE REDUCTION
AFM RF RATIO
+8dB
VOLUME L
VOLUME R
INPUT SET
NORMAL SET
AGC
ANM PB+L1
ANM REC+L1R
NADJ.
REC EQ.
PB EQ.
ANM SP/LP
EOSEL
LINE SEL
AFM PB
ANM PB
OUT SEL
+5dB 12V
RFAOUT
RFCMUTE
L OUT
R OUT
RF A
HF REC
HSW-A
HF PB
EVER 12V
EVER 5V
GND
BH
BC
VOLTAGE MODE:
EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ. -8DBS
PB:TTV-N1-PB
REC:SP REC MODE(EE)

SCHEMATIC DIAGRAM – 6 (JACK)



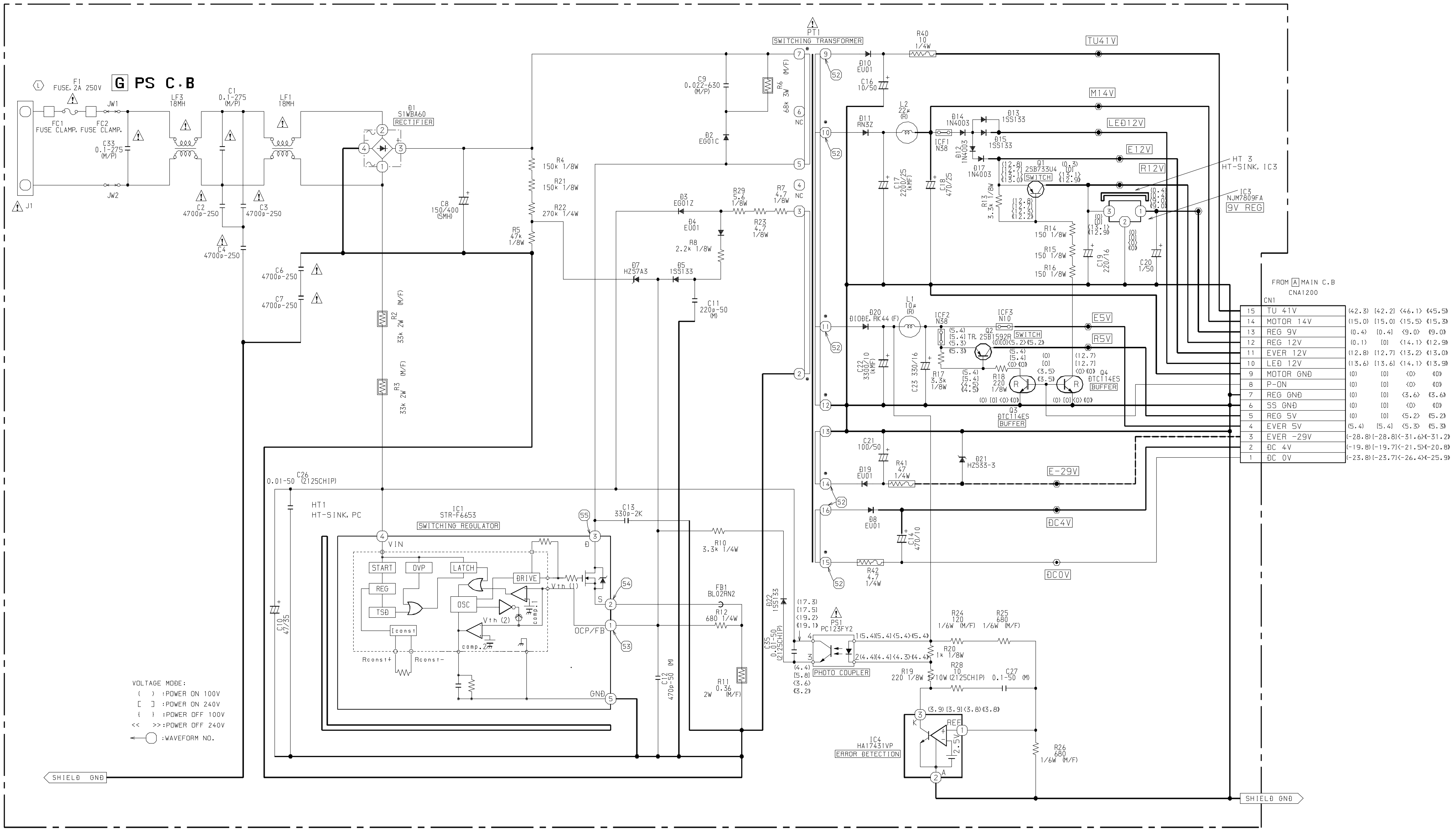
E JACK C.B
CONNECTOR AV IN/OUT TV
CN1403
J1401
OUT R L V
IN R L V
IC1401 LC74761M CHARACTER GENERATOR
IC1402 BA10324 OP AMP
Q1401 BUFFER
Q1402 BUFFER
Q1403 BUFFER
Q1404 BUFFER
Q1405 DTC323TS AUDIO MUTE
Q1406 DTC323TS AUDIO MUTE
Q1407 BUFFER
Q1408 SWITCH
Q1409 BUFFER
D GND
XI
XO
HD
VD
CGCS
CG SDA
CG SCL
RSP
D VDD
SYNC DET
VCO OUT
VCO IN
FC
AMP OUT
AMP IN
PD OUT
A GND
SEPC
SYNC IN
CVCR
CVIN
A VDD
CV OUT
M-PAL DET
GND
REG 5V
REG 9V
C1
C2
C3
C4
C5
C6
C7
C8
1 LINE R OUT
2 GND
3 LINE L OUT
4 GND
5 LINE2 R IN
6 GND
7 LINE2 L IN
8 GND
9 LINE1 R IN
10 GND
11 LINE1 L IN
12 GND
13 AV R IN
14 GND
15 AV L IN
CN1402
TO D HA-HIFI C.B CN702
1 LINE2 R IN
2 GND
3 LINE2 L IN
4 GND
5 LINE V OUT
6 REG 9V
7 LINE1 V IN
8 GND
9 AV
10 GND
11 RF V
12 REG 5V
13 PB 12V
14 CG SCL
15 CG SDA
16 CGCS
CN1401
TO A MAIN C.B CN303
1 GND
2 K-FILT
3 REG 5V
4 C-SYNC
5 M-PAL DET
6 A-MUTE
7 REG 9V
CN1404
TO A MAIN C.B CN304
2SC2412KR
2SA1037K (R)
DTC144EK
FLR50
LF5.0S (J RANK)
1SS133 (87-A40-470-08)
FILM CAP (TFL)
VOLTAGE MODE:
EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ, -8DBS
PB:TTV-N1-PB
REC:SP REC MODE (EE)
SIGNAL:
VIDEO IN
VIDEO OUT
AUDIO IN
AUDIO OUT

SCHEMATIC DIAGRAM – 7 (TUNER)

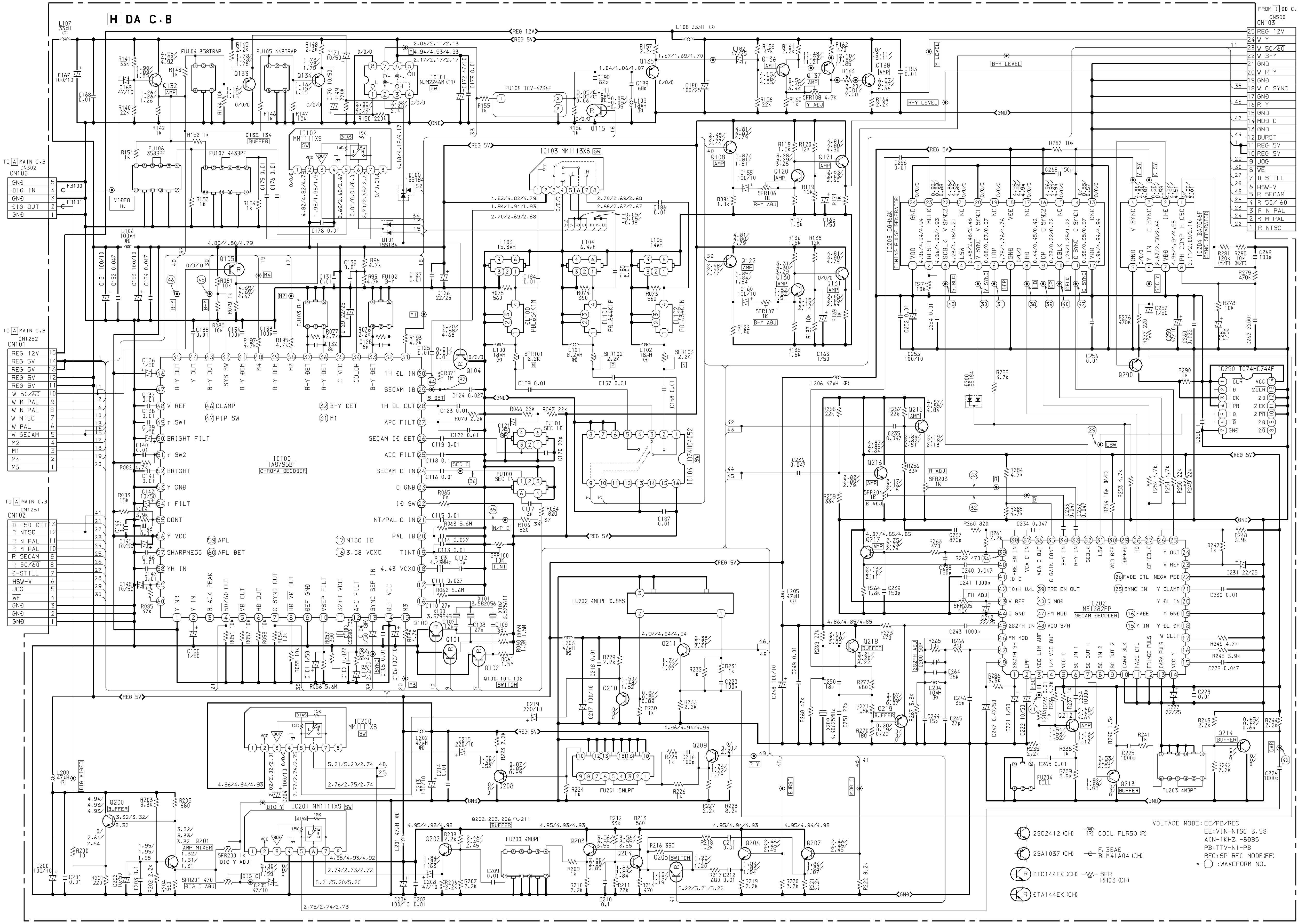


F TUNER C.B
TU802 TMUG3-301A G/K/I
AERIAL
RF OUT
EVER 5V
SW1
GND
RF V
RF A
SW2
REG 5V
TU
LB
AGC
NC
REG 9V
AFT
UB
HB
SW3
AUDIO OUT
AFT OUT
VIDEO OUT
S803
PAL SOUND MODE SW
K
I
G
PAL
NTSC
S802
TUNER SELECT SW
JW805
Q810
INVERTER
Q811 2SA952
SWITCH
Q812
BUFFER
Q813
BUFFER
Q815 2SA952
SWITCH
Q836
FILTER
Q816
SWITCH
Q817
SWITCH
Q814
Q827
Q818
Q819 2SA1296
SWITCH
Q821
Q822
SWITCH
Q820
BUFFER
Q823
SWITCH
Q824
BUFFER
Q825
BUFFER
Q829
Q830
BUFFER
Q831
BUFFER
Q826
MUTE
Q828
Q814, 827, 818, 828, 829
INVERTER
GND
CN801
EVER 5V
GND
REG 5V
GND
RF V
REG 9V
EVER 41V
TU V
GND
TU 2 SEL
RF IIC SDA
RF IIC SCL
TU SCL
TU SDA
TU CS
TU PWM
L BAND
U BAND
H BAND
FROM A MAIN C.B CN1281
L812 100μH
C880 0.1
C872 100/10
C873 0.01
PWM
TU V
R850 1.2k
C841 330p
R851 10k
R852 6.8k
D804
R865 2.2k
AFT D
T MUTE
AFT C
CN802
TV/VCR
T MUTE
AFT CURVE
REG 12V
US M2
US M1
US M3
GND
RF A
GND
TU A R
GND
TU A L
GND
TU A M
GND
ST
BIL.SAP
FROM A MAIN C.B CN1282
SAP:BIL
REG 9V
L809 100μH
L803 2.2μH
C824 0.056
EVER 41V
Q801
INVERTER
Q802 2SA952
SWITCH
REG 5V
JW832
IC802
IC KA33V
INVERTER
Q803
Q804 2SA1296
SWITCH
Q806
BUFFER
Q807
BUFFER
Q808
BUFFER
Q809
JW802
SFR801 10K
SFR801
SEPARATION ADJ.
D802
L804 2.2μH
1CH
2CH
OFF
S801
NTSC RF OUT SELECT SW
L801 47μH
L802 10μH
RF A
1CH/2CH
REG 5V
TV/VCR
RF V
PB 5V
TU 32V
CLOCK
DATA
ENABLE
LOCK
TP
REG 9V
AUDIO OUT
GND
AFT OUT
TP
VIDEO OUT
RF OUT
AERIAL
TU801 TMLJZ
FROM J MULTIPLEXER C.B
CN803
REG 9V
TU AM
TU AL
TU AR
T MUTE
GND
NC
NC
NC
BIL.SAP
ST
MPX IN
GND
C-TR. 2SC2412KR
C-TR. 2SA1037K (R)
C-TR. DTC144EK
CHIP CAP.
FILM CAP.
(TF)
ELECTRIC CAP.
AX RESISTER
FLR50
DIODE, 1SS133
AX JUMPER
CHECK LAND
CHIP RESISTER
LFS.0S
WAVEFORM NO.

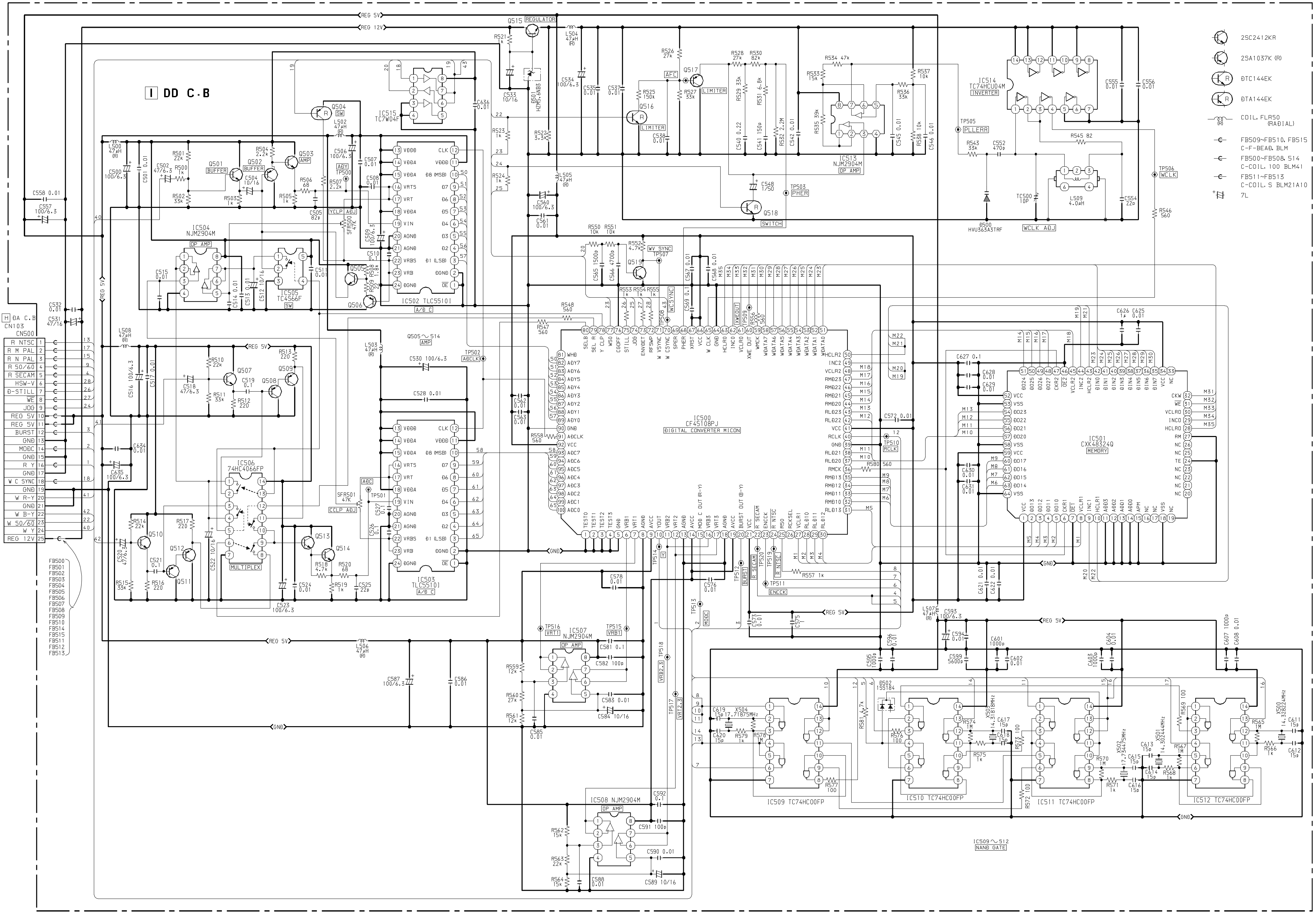
SCHEMATIC DIAGRAM – 8 (PS)

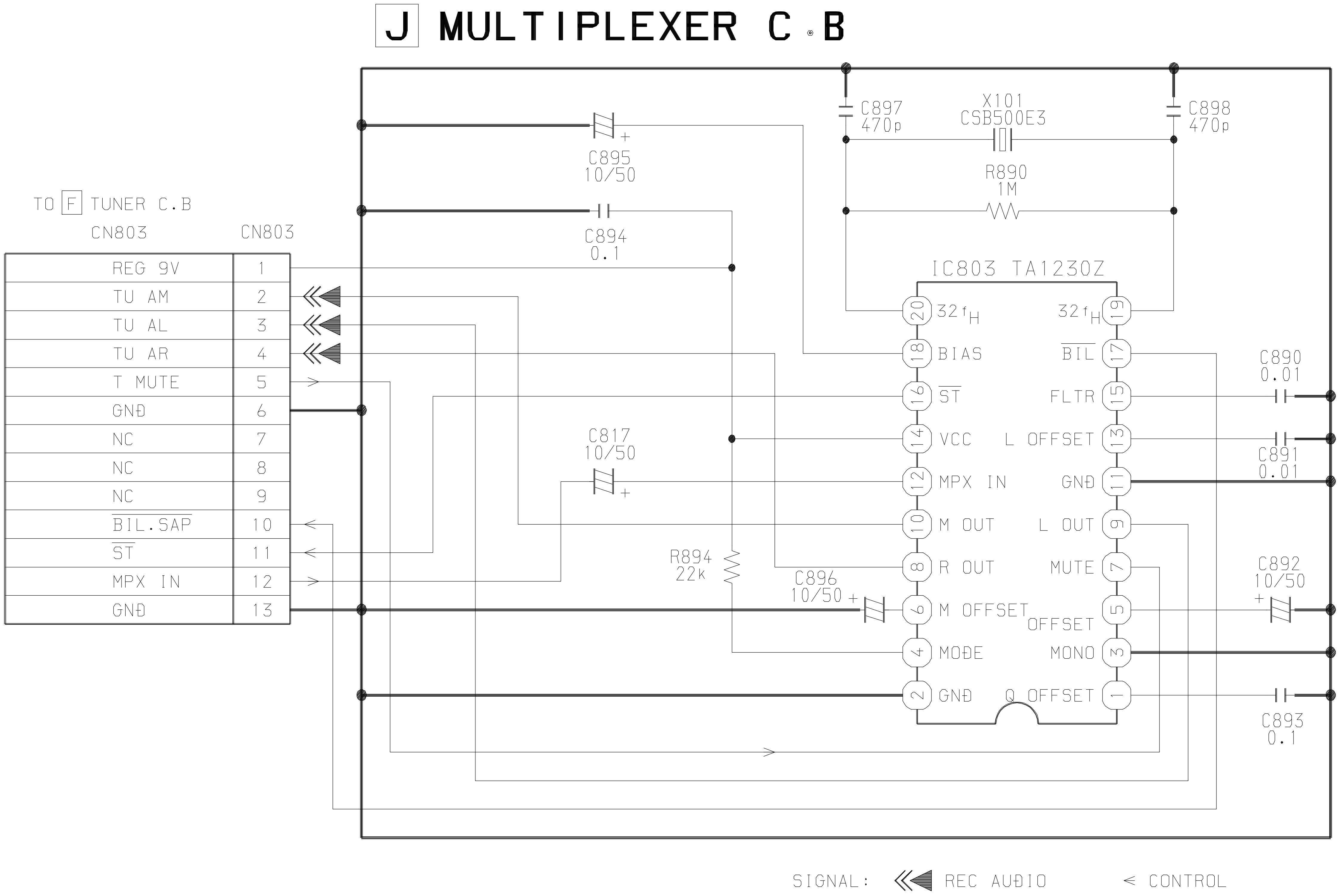

G PS C.B
F1 FUSE 2A 250V
FC1 FUSE CLAMP
FC2 FUSE CLAMP
JW1
JW2
J1
C33 0.1-275 (M/P)
LF3 18MH
C1 0.1-275 (M/P)
LF1 18MH
C2 4700p-250
C3 4700p-250
C4 4700p-250
C6 4700p-250
C7 4700p-250
D1 S1WBA60 RECTIFIER
C8 150/400 (SMH)
R4 150k 1/8W
R21 150k 1/8W
R22 270k 1/4W
R5 47k 1/8W
R2 33k 2W (M/F)
R3 33k 2W (M/F)
PT1 SWITCHING TRANSFORMER
C9 0.022-630 (M/P)
R6 68k 3W (M/F)
D2 EG01C
D3 EG01Z
D4 EU01
R29 5.6 1/8W
R7 4.7 1/8W
R23 4.7 1/8W
R8 2.2k 1/8W
D7 HZS7A3
D5 1SS133
C11 220p-50 (M)
NC
R40 10 1/4W
D10 EU01
C16 10/50
D11 RN3Z
L2 22µ (R)
ICF1 N38
D14 1N4003
D13 1SS133
D12 1N4003
D15 1SS133
D17 1N4003
Q1 2SB733U4 SWITCH
C17 2200/25 (KMF)
C18 470/25
R13 3.3k 1/8W
R14 150 1/8W
R15 150 1/8W
R16 150 1/8W
C19 220/16
C20 1/50
IC3 NJM7809FA
HT 3 HT-SINK, IC3
TU41V
M14V
LED12V
E12V
R12V
9V REG
D20 DIODE, RK44 (F)
L1 10µ (R)
ICF2 N38
ICF3 N10
Q2 TR. 2SB1592R SWITCH
C22 3300/10 (KMF)
C23 330/16
R17 3.3k 1/8W
R18 220 1/8W
Q3 DTC114ES BUFFER
Q4 DTC114ES BUFFER
E5V
R5V
C21 100/50
R41 47 1/4W
D19 EU01
D21 HZS33-3
E-29V
D8 EU01
C14 470/10
DC4V
R42 4.7 1/4W
DC0V
C26 0.01-50 (2125CHIP)
HT1 HT-SINK, PC
IC1 STR-F6653 SWITCHING REGULATOR
VIN
START
OVP
LATCH
REG
TSD
BRIVE
OSC
Iconst
Rconst+
Rconst-
Vth (1)
Vth (2)
comp.1
comp.2
D
S
OCP/FB
GND
C13 330p-2K
R10 3.3k 1/4W
FB1 BL02RN2
R12 680 1/4W
R11 0.36 2W (M/F)
C12 470p-50 (M)
C10 47/35
D22 1SS133
C35 0.01-50 (2125CHIP)
PS1 PC123FY2 PHOTO COUPLER
R24 120 1/6W (M/F)
R25 680 1/6W (M/F)
R20 1k 1/8W
R19 220 1/8W
R28 10 (2125CHIP)
C27 0.1-50 (M)
IC4 HA17431VP ERROR DETECTION
R26 680 1/6W (M/F)
REF
SHIELD GND
FROM A MAIN C.B
CNA1200
CN1
15 TU 41V (42.3) [42.2] {46.1} «45.5»
14 MOTOR 14V (15.0) [15.0] {15.5} «15.3»
13 REG 9V (0.4) [0.4] {9.0} «9.0»
12 REG 12V (0.1) [0] {14.1} «12.9»
11 EVER 12V (12.8) [12.7] {13.2} «13.0»
10 LED 12V (13.6) [13.6] {14.1} «13.9»
9 MOTOR GND (0) [0] {0} «0»
8 P-ON (0) [0] {0} «0»
7 REG GND (0) [0] {3.6} «3.6»
6 SS GND (0) [0] {0} «0»
5 REG 5V (0) [0] {5.2} «5.2»
4 EVER 5V (5.4) [5.4] {5.3} «5.3»
3 EVER -29V (-28.8) [-28.8] {-31.6} «-31.2»
2 DC 4V (-19.8) [-19.7] {-21.5} «-20.8»
1 DC 0V (-23.8) [-23.7] {-26.4} «-25.9»
VOLTAGE MODE:
( ) :POWER ON 100V
[ ] :POWER ON 240V
{ } :POWER OFF 100V
<< >>:POWER OFF 240V
:WAVEFORM NO.

SCHEMATIC DIAGRAM – 9 (DA)


H DA C.B
TO A MAIN C.B CN302 CN100
TO A MAIN C.B CN1252 CN101
TO A MAIN C.B CN1251 CN102
FROM I 00 C.B CN500 CN103
IC100 TA8795BF CHROMA DECODER
IC101 NJM2246M (T1) SW
IC102 MM1111XS SW
IC103 MM1113XS SW
IC104 HD74HC4052 SW
IC200 MM1111XS SW
IC201 MM1111XS SW
IC202 M51282FP SECAM DECODER
IC203 SGH46K TIMING PULSE GENERATOR
IC204 BA7044F SYNC SEPARATOR
IC290 TC74HC74AF
FU104 358TRAP
FU105 443TRAP
FU106 358BPF
FU107 443BPF
FU108 TCV-4236P
FU200 4MBPF
FU201 5MLPF
FU202 4MLPF 0.8MS
FU203 4MBPF
FU204 BELL
DL100 PDL644K1M
DL101 PDL644K1P
DL102 PDL654K1N
VOLTAGE MODE: EE/PB/REC
EE:VIN-NTSC 3.58
AIN-1KHZ -8DBS
PB:TTV-N1-PB
REC:SP REC MODE(EE)
:WAVEFORM NO.
2SC2412 (CH)
2SA1037 (CH)
DTC144EK (CH)
DTA144EK (CH)
COIL FLR50 (R)
F. BEAD BLM41A04 (CH)
SFR RH03 (CH)

SCHEMATIC DIAGRAM – 10 (DD)


I DD C.B
TO H ĐA C.B
CN103
CN500
R NTSC 1
R M PAL 2
R N PAL 3
R 50/60 4
R SECAM 5
HSW-V 6
Đ-STILL 7
WE 8
JOG 9
REG 5V 10
REG 5V 11
BURST 12
GNĐ 13
MOĐC 14
GNĐ 15
R Y 16
GNĐ 17
W C SYNC 18
GNĐ 19
W R-Y 20
GNĐ 21
W B-Y 22
W 50/60 23
W Y 24
REG 12V 25
FB500
FB501
FB502
FB503
FB504
FB505
FB506
FB507
FB508
FB509
FB510
FB514
FB515
FB511
FB512
FB513
REG 5V
REG 12V
GNĐ
Q515 REGULATOR
L504 47µH (R)
C534 100/6.3
C535 0.01
C537 0.01
R526 27k
Q517 LIMITER
Q516 LIMITER
AFC
R525 150k
R527 33k
C538 0.01
R528 27k
R530 82k
R529 33k
R531 6.8k
R532 2.2M
R534 47k
R533 15k
R535 39k
R536 33k
R537 10k
R538 10k
IC513 NJM2904M OP AMP
C540 0.22
C541 150p
C542 0.01
C545 0.01
C546 0.01
Q518 SWITCH
C548 1/50
TP503 PHER
IC514 TC74HCU04M INVERTER
C555 0.01
C556 0.01
TP505 PLLERR
R543 33k
C552 470p
R545 82
TC500 10P
D500 HVU363A3TRF
L509 4.0µH
C554 22p
TP506 WCLK
WCLK AĐJ
R546 560
IC515 TC7W04F
Q504 SW
L502 47µH (R)
C533 10/16
D501 HZM5.6NB3
R521 1k
R522 3.3k
R523 1k
R524 1k
L505 47µH (R)
C560 100/6.3
C561 0.01
C636 0.01
L500 47µH (R)
C500 100/6.3
C501 0.01
C502 47/6.3
R500 1k
R501 22k
R502 33k
R503 1k
Q501 BUFFER
Q502 BUFFER
C504 10/16
R504 2.2k
Q503 AMP
R505 1k
R506 68
C505 82p
C506 100/6.3
ADY TP500
R507 2.2k
YCLP AĐJ
SFR500 47K
C507 0.01
C508 0.01
C509 100/6.3
C510 0.1
IC502 TLC5510I A/Đ C
VĐĐĐ
VĐĐA
VRTS
VRT
VIN
AGNĐ
VRBS
VRB
ĐGNĐ
CLK
Đ8 (MSB)
Đ1 (LSB)
OE
IC504 NJM2904M OP AMP
C515 0.01
C514 0.01
C513 0.01
C512 10/16
IC505 TC4S66F SW
C511 0.01
Q505
Q506
R508 1.8k
R509 1.8k
C558 0.01
C557 100/6.3
C532 0.01
C531 47/16
L508 47µH (R)
C516 100/6.3
C517 0.01
R510 22k
Q507
C518 47/6.3
R511 33k
C519 0.1
R512 220
Q508
R513 220
Q509
C634 0.01
C635 100/6.3
IC506 74HC4066FP MULTIPLEX
R514 22k
Q510
C520 47/6.3
C521 0.1
Q512
R515 33k
R516 220
Q511
R517 220
C522 10/16
C523 100/6.3
Q513
Q514
R518 4.7k
R520 68
R519 1k
C524 0.01
C525 22p
L503 47µH (R)
Q505~514 AMP
C530 100/6.3
TP502 AĐCLK
C528 0.01
AĐC
TP501
SFR501 47K
CLCP AĐJ
C527 0.1
C526 0.1
IC503 TLC5510I A/Đ C
R550 10k
R551 10k
R552 4.7k
WV SYNC
TP507
Q519
C565 1500p
C566 4700p
R553 1k
R554 1k
R555 1k
R548 560
R547 560
C562 0.01
C563 0.01
R558 560
IC500 CF45108PJ DIGITAL CONVERTER MICON
TP508
C567 0.01
C568 0.01
C569 0.1
TP509
R580 560
C572 0.01
TP510 RCLK
R557 1k
TP511 ENCCK
TP514
TP520
TP519 R NTSC
TP512 R SECAM
C576 0.01
C578 0.01
TP513 MOĐC
C573
C575
IC501 CXK48324Q MEMORY
C626 0.01
C625 0.01
C627 0.1
C628 0.01
C629 0.01
C630 0.01
C631 0.01
C621 0.01
C622 0.01
L507 47µH (R)
C593 100/6.3
C594 0.01
C595 1000p
C596 0.01
C599 5600p
C601 1000p
C602 0.01
C603 1000p
C604 0.01
C607 1000p
C608 0.01
L506 47µH (R)
C587 100/6.3
C586 0.01
TP516 VRT1
TP515 VRB1
IC507 NJM2904M OP AMP
C581 0.1
C582 100p
C583 0.01
C584 10/16
C585 0.01
R559 12k
R560 27k
R561 12k
TP518 VRB2,3
TP517 VRT2,3
IC508 NJM2904M OP AMP
C592 0.1
C591 100p
C590 0.01
C589 10/16
C588 0.01
R562 15k
R563 22k
R564 15k
C619 15p
X504 17.71875MHz
C620 15p
R579 1k
R578 1M
D502 1SS184
R581 4.7k
R576 100
R574 1M
X503 14.31818MHz
C617 15p
C618 15p
R573 100
R575 1k
R577 100
R572 100
R571 1k
R570 1M
X502 17.734475MHz
C613 15p
C615 15p
C614 15p
C616 15p
X501 14.302444MHz
R567 1M
R568 1k
R569 100
X500 14.328224MHz
R565 1M
R566 1k
C611 15p
C612 15p
IC509 TC74HC00FP
IC510 TC74HC00FP
IC511 TC74HC00FP
IC512 TC74HC00FP
IC509~512 NANĐ GATE
2SC2412KR
2SA1037K (R)
ĐTC144EK
ĐTA144EK
COIL, FLR50 (RAĐIAL)
FB509~FB510, FB515 C-F-BEAĐ, BLM
FB500~FB508, 514 C-COIL, 100 BLM41
FB511~FB513 C-COIL, S BLM21A10
7L


J MULTIPLEXER C.B
TO F TUNER C.B
CN803
CN803
REG 9V 1
TU AM 2
TU AL 3
TU AR 4
T MUTE 5
GND 6
NC 7
NC 8
NC 9
BIL.SAP 10
ST 11
MPX IN 12
GND 13
C895 10/50
C894 0.1
C817 10/50
R894 22k
C896 10/50
C897 470p
X101 CSB500E3
R890 1M
C898 470p
IC803 TA1230Z
20 32fH
18 BIAS
16 ST
14 VCC
12 MPX IN
10 M OUT
8 R OUT
6 M OFFSET
4 MODE
2 GND
19 32fH
17 BIL
15 FLTR
13 L OFFSET
11 GND
9 L OUT
7 MUTE
5 OFFSET
3 MONO
1 Q OFFSET
C890 0.01
C891 0.01
C892 10/50
C893 0.1
SIGNAL:
REC AUDIO
CONTROL

サービス技術ニュース	
番号	連絡内容
G－　　－	
G－　　－	
G－　　－	

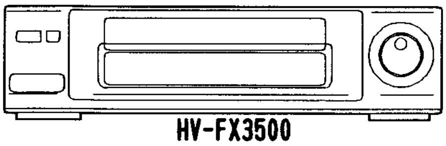
アイワ株式会社
AIWA CO.,LTD.

9820527
Tokyo Japan

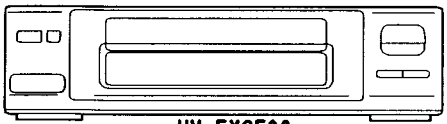
〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)

Printed in Singapore

HV-FX3500
HV-FX2500



HV-FX3500



HV-FX2500

STEREO VIDEO
CASSETTE RECORDER

- BASIC VIDEO MECHANISM: TN-6500P4LRH111S
- TYPE: Z(HV-FX3500/FX2500)
  ED(FX3500). EH(FX2500)

SERVICE MANUAL

REVISION PUBLISHING

●This Service Manual is the "Revision Publishing" and replaces "Simple Manual" (S/M Code No. 09-969-167-10I).

●If requiring information about the mechanism, see Service Manual of TN-6500(S/M Code No. 09-95B-115-90T) and (S/M Code No. 09-967-146-10T).

S/M Code No. 09-96A-161-40I

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SPECIFICATIONS

< HV-FX3500Z >

Video Recording system	Rotary 2 head helical scanning system
Video head	Double azimuth 4 head
Video signal	PAL colour signal, 625 lines, 50 fields
Recording/playback time	4 hours 20 minutes max. with E-260 tape, SP 8 hours 40 minutes max. with E-260 tape, LP
Fast forward/rewind time	Approx. 3 min. with E-180 tape
Tape speed	SP: 23.39 mm/sec. LP: 11.69 mm/sec.
Usable cassettes	VHS-PAL video cassettes
Channel coverage	VL (VHF–Low) : E2–4, S1–S10 VH (VHF–High) : E5–12, S11–S41 U (UHF) : 21–69
RF output	UHF channel between 30 and 39
RF output level	73 dBμ, 75 ohms
Video input level	0.5 – 2.0 Vp-p, 75 ohms, unbalanced
Video output level	1.0 Vp-p, 75 ohms, unbalanced
Horizontal resolution	240 lines (nominal)
Video S/N	43 dB (nominal)
Audio track	3 tracks (Hi-Fi sound 2 tracks, Normal sound 1 track)
Hi-Fi Frequency response	20 Hz — 20 KHz
Hi-Fi Dynamic range	More than 90 dB
Hi-Fi Wow and Flutter	Less than 0.01% Wrms (nominal)
Audio input level	SCART: – 8 dB, 22 Kohms RCA: – 8 dB, 22 Kohms
Audio output level	SCART: – 8 dB, less than 2.2 Kohms RCA: – 8 dB, less than 2.2 Kohms
Operating temperature	5 °C — 40 °C
Power requirements	230 V AC, 50 Hz
Power consumption	33 watts
Dimensions	380 (W) × 293 (D) × 99 (H) mm (15 × 11⁵/₈ × 4 in.)
Weight	Approx. 5 kg (11 lbs.)

- Design and specifications are subject to change without notice.

< HV-FX3500ED >

Video Recording system	Rotary 2 head helical scanning system
Video head	Double azimuth 4 head
Video signal	PAL color signal, 625 lines, 50 fields
Recording/playback time	4 hours 20 minutes max. with E-260 tape, SP 8 hours 40 minutes max. with E-260 tape, LP
Fast forward/rewind time	Approx. 3 min. with E-180 tape
Tape speed	SP: 23.39 mm/sec. LP: 11.69 mm/sec.
Usable cassettes	VHS-PAL video cassettes
Channel coverage	VL (VHF–Low) : E2–4, S1–S10 VH (VHF–High) : E5–12, S11–S41 U (UHF) : 21–69
RF output	UHF channel between 30 and 39
RF output level	73 dBμ, 75 ohms
Video input level	0.5 – 2.0 Vp-p, 75 ohms, unbalanced
Video output level	1.0 Vp-p, 75 ohms, unbalanced
Horizontal resolution	240 lines (nominal)
Video S/N	43 dB (nominal)
Audio track	3 tracks (Hi-Fi sound 2 tracks, Normal sound 1 track)
Hi-Fi Frequency response	20 Hz — 20 KHz
Hi-Fi Dynamic range	More than 90 dB
Hi-Fi Wow and Flutter	Less than 0.01% Wrms (nominal)
Audio input level	SCART: – 8 dB, 22 Kohms RCA: – 8 dB, 22 Kohms
Audio output level	SCART: – 8 dB, less than 2.2 Kohms RCA: – 8 dB, less than 2.2 Kohms
Operating temperature	5 °C — 40 °C
Power requirements	230 V AC, 50 Hz
Power consumption	33 watts
Dimensions	380 (W) × 293 (D) × 99 (H) mm (15 × 11⁵/₈ × 4 in.)
Weight	Approx. 5 kg (11 lbs.)

- Design and specifications are subject to change without notice.

< HV-FX2500Z >

Video recording system	Rotary 2 head helical scanning system
Video head	Double azimuth 4 heads
Video signal	PAL color signal, 625 lines, 50 fields
Recording/playback time	4 hours 20 minutes max. with E-260 tape, SP 8 hours 40 minutes max. with E-260 tape, LP
Fast forward/rewind time	Approx. 3 min. with E-180 tape
Tape speed	SP: 23.39 mm/sec. LP: 11.69 mm/sec.
Usable cassettes	VHS-PAL video cassettes
Channel coverage	VL (VHF–Low) : E2–4, S1–S10 VH (VHF–High) : E5–12, S11–S41 U (UHF) : 21–69
RF output	UHF channel between 30 and 39
RF output level	73 dBμ, 75 ohms
Video input level	0.5 – 2.0 Vp-p, 75 ohms, unbalanced
Video output level	1.0 Vp-p, 75 ohms, unbalanced
Horizontal resolution	240 lines (nominal)
Video S/N	43 dB (nominal)
Audio track	3 tracks (Hi-Fi sound 2 tracks, Normal sound 1 track)
Hi-Fi Frequency response	20 Hz — 20 KHz
Hi-Fi Dynamic range	More than 90 dB
Hi-Fi Wow and Flutter	Less than 0.01% (nominal)
Audio input level	SCART: – 8 dB, 22 Kohms RCA: – 8 dB, 22 Kohms
Audio output level	SCART: – 8 dB, less than 2.2 Kohms RCA: – 8 dB, less than 2.2 Kohms
Operating temperature	5 °C — 40 °C
Power requirements	230 V AC, 50 Hz
Power consumption	33 watts
Dimensions	380 (W) × 293 (D) × 99 (H) mm (15 × $11^{5}/_{8}$ × 4 in.)
Weight	Approx. 4.9 kg (10.78 lbs.)

- Design and specifications are subject to change without notice.

< HV-FX2500EH >

Video recording system	Rotary 2 head helical scanning system
Video head	Double azimuth 4 heads
Video signal	PAL color signal, 625 lines, 50 fields
Recording/playback time	4 hours 20 minutes max. with E-260 tape, SP 8 hours 40 minutes max. with E-260 tape, LP
Fast forward/rewind time	Approx. 3 min. with E-180 tape
Tape speed	SP: 23.39 mm/sec. LP: 11.69 mm/sec.
Usable cassettes	VHS-PAL video cassettes
Channel coverage	VL (VHF–Low) : E2–4, S1–S10 VH (VHF–High) : E5–12, S11–S41 U (UHF) : 21–69
RF output	UHF channel between 30 and 39
RF output level	73 dBμ, 75 ohms
Video input level	0.5 – 2.0 Vp-p, 75 ohms, unbalanced
Video output level	1.0 Vp-p, 75 ohms, unbalanced
Horizontal resolution	240 lines (nominal)
Video S/N	43 dB (nominal)
Audio track	3 tracks (Hi-Fi sound 2 tracks, Normal sound 1 track)
Hi-Fi Frequency response	20 Hz — 20 KHz
Hi-Fi Dynamic range	More than 90 dB
Hi-Fi Wow and Flutter	Less than 0.01% (nominal)
Audio input level	SCART: – 8 dB, 22 Kohms RCA: – 8 dB, 22 Kohms
Audio output level	SCART: – 8 dB, less than 2.2 Kohms RCA: – 8 dB, less than 2.2 Kohms
Operating temperature	5 °C — 40 °C
Power requirements	230 V AC, 50 Hz
Power consumption	33 watts
Dimensions	380 (W) × 293 (D) × 99 (H) mm (15 × $11^{5}/_{8}$ × 4 in.)
Weight	Approx. 4.9 kg (10.78 lbs.)

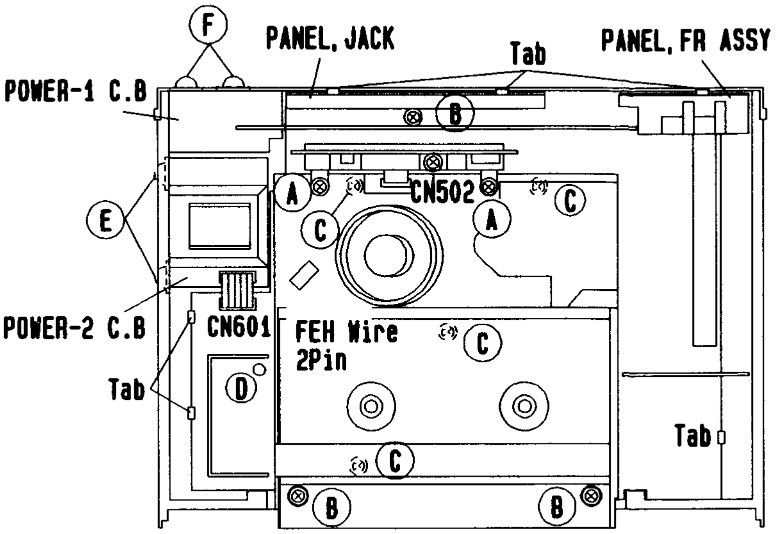
- Design and specifications are subject to change without notice.

DISASSEMBLY INSTRUCTION

1. "Cabinet,Steel" Removal
   1) Remove five screws and the "Cabinet Steel".

2. "Panel,Front" Removal
   1) Release seven tabs and remove the "Panel,Front".

3. "Front-1 C.B" and "Front-2 C.B" Removal
   1) Release tab and remove the "Front-1 C.B" and "Front-2 C.B".



F
PANEL, JACK
Tab
PANEL, FR ASSY
POWER-1 C.B
B
E
A
C
CN502
A
C
POWER-2 C.B
CN601
FEH Wire
2Pin
C
Tab
D
Tab
C
B
B

Figure-1

4. "Mechanism" Removal (See Figure-1)
   1) Remove two screws (Ⓐ).
   2) Disconnect connector CN502 the "Head Amp C.B".
   3) Disconnect wire (2Pin) on the "FEH".
   4) Remove three mechanism screw (Ⓑ).

5. "Main C.B" Removal (See Figure-1)
   1) Disconnect connector CN601 the "Main C.B".
   2) Remove six screws (Ⓒ).
   3) Remove screw (Ⓓ).
   4) Release two tabs of the "Panel, Jack" and lift them.
   5) Release tab of the "Panel, RF Assy" and lift them.
   6) Release three tabs of the "Mein C.B " and lift them.

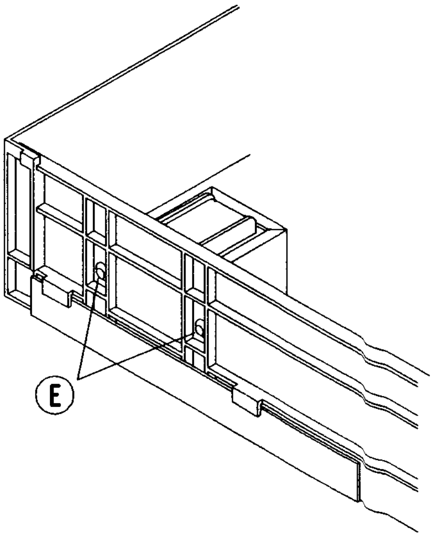


Figure-2

6. "Power-2 C.B" Removal (See Figure-1, Figure-2)
   1) Remove two screws (Ⓔ).

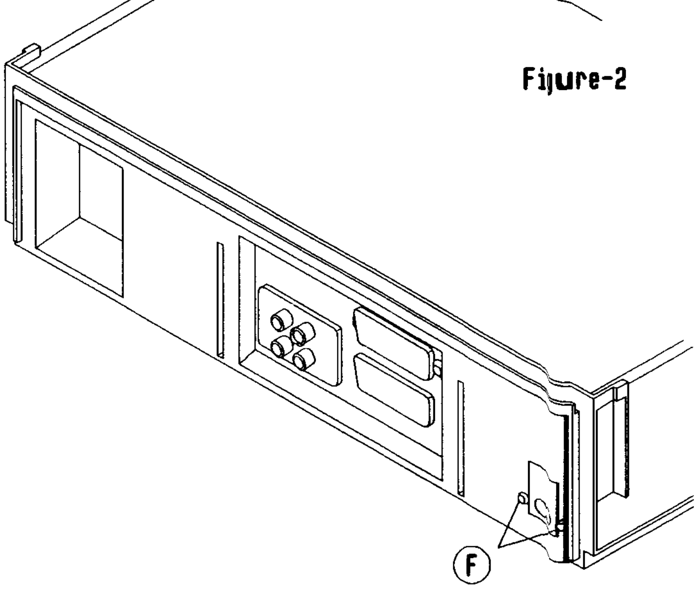


Figure-3

7. "Power-1 C.B" Removal (See Figure-1, Figure-3)
   1) Remove two screws (Ⓕ).

VCR TEST TAPE INTERCHANGEABILITY TABLE

新しいタイプのテストテープは、CH-1 (NTSC用) と CH-2 (PAL用) の２種類があります。それぞれのテープには、(1) ～ (4) で区別する４種類の信号が、次の順番と時間で記録されています。
There are two types of the new allgnment tape CH-1B (for NTSC) and CH-2 (for PAL) . On each tape four signals (1) - (4) are recorded for the times and in the order shown below.

(1) : 8min. → (2) : 2min. → (3) : 5min. → (4) : 5min.

TTV-MP1 (M-PAL用) ,TTV-MS1 (MESECAM用) ,TTV-S1 (SECAM用) については現行通りです。
The TTV-MP1 (for M-PAL) ,TTV-MS1 (for MESECAM) and TTV-S1 (for SECAM) allgnment tapes have the same contents as the previous tapes.

方式 Method	現行タイプ Now in use TYPE		新タイプ New Type		主な用途 Application
	テープ名 Model	記録内容 ※1 Contents ※1	テープ名 Model	記録内容 ※1 Contents ※1	
NTSC	TTV-N1	NTSC,Color, 1kHz,SP	CH-1B(2)	NTSC,Stairsteps, 1kHz,SP	PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 PB-Y Level/General electrical ADJ.Head ACE Height/Tilt ADJ.
	TTV-N1E	NTSC,Color, 1kHz,EP	CH-1B(4) ※2	NTSC,Color,1kHz, EP	ｽｲｯﾁﾝｸﾞ位置調整。 Switching position ADJ.
	TTV-N2	NTSC,Stairsteps, 7kHz,SP	CH-1B(1)	NTSC,Stairsteps, 7kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。ｽｰﾊﾟｰｸﾘｱｰﾋﾟｸﾁｬｰのﾚﾍﾞﾙ調整。 Head ACE Azimuth ADJ.
	TTV-N12 (SCV-1998)	NTSC,Color, 1kHz,SP	CH-1B(4)	NTSC,Color,1kHz, EP	FMｴﾝﾍﾞﾛｰﾌﾟ調整。Xﾊﾞﾘｭｰ(位相)調整。 FM Envelope ADJ. X-Value ADJ.
	TTV-N7A	NTSC,Stairsteps, 1kHz,SP,HiFi400Hz	CH-1B(3)	NTSC,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
PAL	TTV-P1	PAL,Color, 1kHz,SP	CH-2(2) ※3	PAL,Stairsteps, 1kHz,SP	ｽｲｯﾁﾝｸﾞ位置調整。(SP専用ﾓﾃﾞﾙ)PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 Switching position ADJ. PB-Y Level/General electical ADJ. Head ACE Height/Tilt ADJ.
	TTV-P1L	PAL,Color, 1kHz,LP	CH-2(4)	PAL,Color,1kHz, LP	ｽｲｯﾁﾝｸﾞ位置調整。(LP対応ﾓﾃﾞﾙ)FMｴﾝﾍﾞﾛｰﾌﾟ調整。(LP対応ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(LP対応ﾓﾃﾞﾙ) Switching position.(LP Model)FM Envelope ADJ. (LP Model)X-Value ADJ.(LP Model)
	TTV-P2	PAL,Stairsteps, 6kHz,SP	CH-2(1)	PAL,Stairsteps, 6kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。FMｴﾝﾍﾞﾛｰﾌﾟ調整。(SP専用ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(SP専用ﾓﾃﾞﾙ) Head ACE Azimuth ADJ. FM Envelope ADJ.(SP Model) X-Value ADJ.(SP Model)
	TTV-P7	PAL,Stairsteps, 1kHz,SP,HiFi 1kHz	CH-2(3)	PAL,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
	TTV-P16	PAL,Color, 400Hz,SP,HiFi 1kHz	変更なし No Changed.		FMﾌｨﾙﾀｰ調整 FM Filter ADJ.

※ 1.ｶﾗｰ方式→映像信号→ﾉｰﾏﾙ音声→ﾃｰﾌﾟｽﾋﾟｰﾄﾞ→ HiFi 音声 の順で記載されています。
※ 1.Described in the order of color format. video signal. linear audio. tape speed and Hi-Fi audio.
※ 2.SP 専用ﾓﾃﾞﾙの場合は、CH-1B の (1) ～ (3) を使用して下さい。
※ 2.Use CH-1B (1) - (3) with models used exclusively in the SP mode.
※ 3.色信号の観測が必要な場合は CH-2 の (3) または (4) を使用して下さい。
※ 3.Use CH-2 (3) and (4) when it is necessary to observe the chroma signal.

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
IC			
	87-A20-266-010		IC,BA7630S
	87-A20-261-040		C-IC,BA15218F<3500Z,3500ED>
	87-A20-263-040		C-IC,CXA1649M<3500Z,3500ED>
	87-A20-262-010		IC,AN5285K<3500Z,3500ED>
	87-027-656-010		IC,TC4066BP<3500Z,3500ED>
	86-JU1-629-010		C-IC,CXP888P60Q-1-101Q<3500Z>
	86-JU1-624-010		C-IC,CXP888P60Q-1-103<3500ED>
	86-JU2-625-010		C-IC,CXP888P60Q-1-104<2500EH>
	86-JU2-626-010		C-IC,CXP888P60Q-1-105<2500Z>
	87-A20-114-040		C-IC,NJM072M
	87-A20-117-010		IC,BA6418N
	87-017-506-080		C-IC,PST600JMT
	87-A20-302-040		C-IC,24LC04BT/SN
	87-A20-152-010		IC,SDA5649
	87-A20-477-010		C-IC,HA118201CF
	87-A20-181-010		IC,MSM7460-63RS
	86-JU1-625-040		C-IC,LC74763M-9156-TLM
	87-A20-282-010		IC,TDA9840<EXCEPT 3500ED>
	87-A20-304-010		IC,TA8721ASN<EXCEPT 3500ED>
	87-A20-177-010		IC,BA7184S
	87-A20-092-010		IC,LA7256
	87-002-862-010		IC,NJM2904L
	87-017-497-010		IC,GL7809
	87-A20-267-010		IC,SAA7283 ZP<3500ED>
	87-A20-179-010		IC,TDA9614H
	87-017-833-080		C-IC,NJM2233BM<3500Z,3500ED>
	87-001-854-010		IC,BA7755A
	87-A20-208-010		C-IC,MN12510F
	82-NE6-617-010		IC,GP1U581X
	87-070-289-040		C-IC,BU2092F
TRANSISTOR			
	87-026-211-080		C-TR,DTA144EK
	87-026-210-080		C-TR,DTC144EK
	89-110-372-080		TR,2SA1037KR
	89-324-122-080		C-TR,2SC2412KR
	89-109-521-080		TR,2SA952K
	89-109-340-480		TR,2SA934Q
	89-113-187-880		TR,2SA1318(T/U)
	89-112-965-080		TR,2SA1296GR
	87-A30-032-010		TR,2SD2394
	89-318-155-080		TR,2SC1815GR
	89-215-652-010		TR,2SB1565E
	87-026-213-080		C-TR,DTC114YK
	89-333-317-080		TR,2SC3331T
	87-026-227-080		C-TR,DTA114EK<2500Z,2500EH>
	89-111-625-080		C-TR,2SA1162GR<3500Z,3500ED>
DIODE			
	87-070-345-080		DIODE,1N4148
	87-027-393-080		ZENER,HZ4C2
	87-017-079-080		ZENER,HZS4A3
	87-070-274-080		DIODE,1N4003 SEM
	87-020-465-080		DIODE,1SS133
⚠	87-017-495-080		DIODE,1N5393
⚠	87-017-415-090		DIODE,RL203
	87-001-239-080		ZENER,HZ30-2
	87-017-135-080		ZENER,HZS12B3
	87-027-400-080		ZENER,HZ5C3
	87-017-519-080		ZENER,HZT-33
	87-027-555-080		ZENER,HZ5C2
MAIN C.B			
C101	87-010-154-080		C-CAP,S 10P-50 D CH
C102	87-010-311-080		C-CAP,S 12P-50 J CH
C103	87-010-196-080		C-CAP,S 0.1-25 Z F
C104	87-010-196-080		C-CAP,S 0.1-25 Z F
C105	87-010-196-080		C-CAP,S 0.1-25 Z F
C106	87-010-754-080		CAP,E 220-10 7L SR
C108	87-010-187-080		C-CAP,S 5600P-50 K B
C109	87-015-681-080		CAP,E 10-16 7L SRA
C110	87-015-681-080		CAP,E 10-16 7L SRA
C111	87-010-754-080		CAP,E 220-10 7L SR
C112	87-015-681-080		CAP,E 10-16 7L SRA
C114	87-015-677-080		CAP,E 100-6.3 7L SRA
C118	87-010-314-080		C-CAP,S 22P-50 J CH
C119	87-010-313-080		C-CAP,S 18P-50 J CH
C120	87-010-196-080		C-CAP,S 0.1-25 Z F
C121	87-010-196-080		C-CAP,S 0.1-25 Z F
C122	87-015-677-080		CAP,E 100-6.3 7L SRA
C123	87-010-178-080		C-CAP,S 1000P-50 K B
C125	87-010-182-080		C-CAP,S 2200P-50 K B
C127	87-010-197-080		C-CAP,S 0.01-25 K B
C129	87-010-263-080		CAP,E 100-10 SME
C131	87-010-197-080		C-CAP,S 0.01-25 K B
C132	87-010-178-080		C-CAP,S 1000P-50 K B
C133	87-010-178-080		C-CAP,S 1000P-50 K B
C134	87-010-197-080		C-CAP,S 0.01-25 K B
C137	87-010-197-080		C-CAP,S 0.01-25 K B
C140	87-010-196-080		C-CAP,S 0.1-25 Z F
C141	87-010-178-080		C-CAP,S 1000P-50 K B
C143	87-010-372-080		CAP,E 2200-6.3 SME
C144	87-010-263-080		CAP,E 100-10 SME
C146	87-010-196-080		C-CAP,S 0.1-25 Z F
C147	87-010-197-080		C-CAP,S 0.01-25 K B
C148	87-015-684-080		CAP,E 47-16 7L SRA
C149	87-010-196-080		C-CAP,S 0.1-25 Z F
C150	87-010-197-080		C-CAP,S 0.01-25 K B
C151	87-010-197-080		C-CAP,S 0.01-25 K B
C152	87-012-365-080		C-CAP,S 0.027-25 K B
C153	87-010-196-080		C-CAP,S 0.1-25 Z F
C154	87-015-681-080		CAP,E 10-16 7L SRA
C155	87-015-681-080		CAP,E 10-16 7L SRA
C156	87-015-681-080		CAP,E 10-16 7L SRA
C157	87-015-684-080		CAP,E 47-16 7L SRA
C159	87-010-197-080		C-CAP,S 0.01-25 K B
C160	87-010-197-080		C-CAP,S 0.01-25 K B
C161	87-015-689-080		CAP,E 10-35 7L SRA
C162	87-010-197-080		C-CAP,S 0.01-25 K B
C164	87-010-196-080		C-CAP,S 0.1-25 Z F
C165	87-010-079-080		CAP,E 100-6.3 5L SRE
C166	87-012-154-080		C-CAP,S 150P-50 J CH GRM
C167	87-010-805-080		C-CAP,S 1-16 Z F
C168	87-010-193-080		C-CAP,S 0.033-25 K F
C169	87-010-182-080		C-CAP,S 2200P-50 K B
C170	87-010-196-080		C-CAP,S 0.1-25 Z F
C171	87-015-677-080		CAP,E 100-6.3 7L SRA
C172	87-010-196-080		C-CAP,S 0.1-25 Z F
C173	87-010-196-080		C-CAP,S 0.1-25 Z F
C184	87-010-393-080		CAP,E 100-35 SME
C188	87-010-112-080		CAP,E 100-16 SME
C189	87-010-263-080		CAP,E 100-10 SME
C191	87-010-196-080		C-CAP,S 0.1-25 Z F
C193	87-010-196-080		C-CAP,S 0.1-25 Z F
C194	87-010-196-080		C-CAP,S 0.1-25 Z F
C195	87-010-374-080		CAP,E 47-10 SME
C197	87-010-196-080		C-CAP,S 0.1-25 Z F
C198	87-010-380-080		CAP,E 47-16 SME
C199	87-010-196-080		C-CAP,S 0.1-25 Z F
C202	87-010-196-080		C-CAP,S 0.1-25 Z F
C203	87-010-380-080		CAP,E 47-16 SME
C204	87-010-196-080		C-CAP,S 0.1-25 Z F
C205	87-015-696-080		CAP,E 2.2-50 7L SRA
C206	87-010-198-080		C-CAP,S 0.022-25 K
C207	87-010-197-080		C-CAP,S 0.01-25 K B
C302	87-010-197-080		C-CAP,S 0.01-25 K B
C303	87-010-196-080		C-CAP,S 0.1-25 Z F

REF. NO	PART NO.	カンリ NO.	DESCRIPTION	REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C304	87-010-145-080		C-CAP,S 1P-50 CH	C405	87-010-196-080		C-CAP,S 0.1-25 Z F
C305	87-010-073-080		CAP,E 3.3-50 5L SRE	C406	87-010-263-080		CAP,E 100-10 SME
C306	87-010-316-080		C-CAP,S 33P-50 J CH	C407	87-010-196-080		C-CAP,S 0.1-25 Z F
C307	87-012-153-080		C-CAP,S 120P-50 J CH GRM	C408	87-010-401-080		CAP,E 1-50 SME
C308	87-010-419-080		CAP,E 4.7-16 5L SRE	C409	87-010-197-080		C-CAP,S 0.01-25 K B
C309	87-010-196-080		C-CAP,S 0.1-25 Z F	C410	87-010-148-080		C-CAP,S 4P-50 CH
C310	87-016-369-080		C-CAP,S 0.033-25 K B	C411	87-010-314-080		C-CAP,S 22P-50 J CH
C311	87-010-180-080		C-CAP,S 1500P-50 K B	C412	87-010-196-080		C-CAP,S 0.1-25 Z F
C312	87-015-694-080		CAP,E 0.47-50 7L SRA	C413	87-010-153-080		C-CAP,S 9P-50 D CH
C313	87-010-313-080		C-CAP,S 18P-50 J CH	C414	87-010-153-080		C-CAP,S 9P-50 D CH
C314	87-010-146-080		C-CAP,S 2P-50 C CH GRM	C415	87-015-695-080		CAP,E 1-50 7L SRA
C315	87-010-197-080		C-CAP,S 0.01-25 K B	C416	87-010-197-080		C-CAP,S 0.01-25 K B
C316	87-010-198-080		C-CAP,S 0.022-25 K B	C417	87-010-263-080		CAP,E 100-10 SME
C317	87-015-694-080		CAP,E 0.47-50 7L SRA	C420	87-010-071-080		CAP,E 1-50 5L SRE
C318	87-010-197-080		C-CAP,S 0.01-25 K B	C421	87-010-196-080		C-CAP,S 0.1-25 Z F
C320	87-015-681-080		CAP,E 10-16 7L SRA	C422	87-010-805-080		C-CAP,S 1-16 Z F
C321	87-010-196-080		C-CAP,S 0.1-25 Z F	C424	87-010-198-080		C-CAP,S 0.022-25 K B
C322	87-015-677-080		CAP,E 100-6.3 7L SRA	C425	87-010-314-080		C-CAP,S 22P-50 J CH
C323	87-015-692-080		CAP,E 0.22-50 7L SRA	C426	87-010-149-080		C-CAP,S 5P-50 CH
C324	87-015-681-080		CAP,E 10-16 7L SRA	C427	87-010-314-080		C-CAP,S 22P-50 J CH
C325	87-015-694-080		CAP,E 0.47-50 7L SRA	C428	87-010-070-080		CAP,E 0.47-50 5L SRE
C326	87-015-681-080		CAP,E 10-16 7L SRA	C429	87-010-079-080		CAP,E 100-6.3 5L SRE
C327	87-015-696-080		CAP,E 2.2-50 7L SRA	C430	87-010-196-080		C-CAP,S 0.1-25 Z F
C328	87-015-697-080		CAP,E 3.3-50 7L SRA	C431	87-010-196-080		C-CAP,S 0.1-25 Z F
C329	87-010-196-080		C-CAP,S 0.1-25 Z F	C432	87-010-316-080		C-CAP,S 33P-50 J CH
C330	87-010-196-080		C-CAP,S 0.1-25 Z F	C433	87-010-196-080		C-CAP,S 0.1-25 Z F
C331	87-010-073-080		CAP,E 3.3-50 5L SRE	C605	87-016-661-090		CAP,E 4700-25 105 TKR
C341	87-010-198-080		C-CAP,S 0.022-25 K B	C606	87-010-112-080		CAP,E 100-16 SME
C342	87-010-197-080		C-CAP,S 0.01-25 K B	C607	87-010-263-080		CAP,E 100-10 SME
C343	87-010-070-080		CAP,E 0.47-50 5L SRE	C608	87-010-112-080		CAP,E 100-16 SME
C344	87-010-178-080		C-CAP,S 1000P-50 K B	C609	87-016-451-090		CAP,E 10000-16 TKR
C345	87-010-068-080		CAP,E 0.22-50 5L SRE	C610	87-010-263-080		CAP,E 100-10 SME
C346	87-012-154-080		C-CAP,S 150P-50 J CH GRM	C611	87-010-263-080		CAP,E 100-10 SME
C349	87-010-071-080		CAP,E 1-50 5L SRE	C612	87-010-260-080		CAP,E 47-25 SME
C350	87-010-198-080		C-CAP,S 0.022-25 K B	C615	87-016-300-080		CAP,E 22-100 SME
C351	87-010-197-080		C-CAP,S 0.01-25 K B	C616	87-016-285-080		CAP,E 47-100 SME
C352	87-010-197-080		C-CAP,S 0.01-25 K B	C617	87-010-405-080		CAP,E 10-50 SME
C353	87-010-196-080		C-CAP,S 0.1-25 Z F	C618	87-010-405-080		CAP,E 10-50 SME
C354	87-010-079-080		CAP,E 100-6.3 5L SRE	C620	87-010-196-080		C-CAP,S 0.1-25 Z F
C355	87-010-197-080		C-CAP,S 0.01-25 K B	C621	87-012-368-080		C-CAP,S 0.1-50 Z F
C356	87-010-197-080		C-CAP,S 0.01-25 K B	C801	87-010-374-080		CAP,E 47-10 SME
C357	87-010-196-080		C-CAP,S 0.1-25 Z F	C802	87-010-196-080		C-CAP,S 0.1-25 Z F
C359	87-010-312-080		C-CAP,S 15P-50 J CH	C803	87-010-196-080		C-CAP,S 0.1-25 Z F
C360	87-010-312-080		C-CAP,S 15P-50 J CH	C804	87-010-196-080		C-CAP,S 0.1-25 Z F
C361	87-010-321-080		C-CAP,S 82P-50 J CH	C805	87-010-263-080		CAP,E 100-10 SME
C362	87-012-145-080		C-CAP,S 270P-50 J CH	C806	87-010-196-080		C-CAP,S 0.1-25 Z F
C363	87-012-156-080		C-CAP,S 220P-50 J CH GRM	C807	87-010-404-080		CAP,E 4.7-50 SME
C364	87-010-198-080		C-CAP,S 0.022-25 K B	C808	87-010-197-080		C-CAP,S 0.01-25 K B
C365	87-010-196-080		C-CAP,S 0.1-25 Z F	C809	87-010-263-080		CAP,E 100-10 SME
C366	87-010-176-080		C-CAP,S 680P-50 J SL	C810	87-010-197-080		C-CAP,S 0.01-25 K B
C367	87-012-153-080		C-CAP,S 120P-50 J CH GRM	C811	87-010-196-080		C-CAP,S 0.1-25 Z F
C368	87-010-178-080		C-CAP,S 1000P-50 K B	C812	87-010-374-080		CAP,E 47-10 SME
C370	87-010-263-080		CAP,E 100-10 SME	C813	87-010-198-080		C-CAP,S 0.022-25 K B
C371	87-010-198-080		C-CAP,S 0.022-25 K B	C814	87-010-197-080		C-CAP,S 0.01-25 K B
C372	87-015-676-080		CAP,E 47-6.3 7L SRA	C815	87-010-404-080		CAP,E 4.7-50 SME
C373	87-010-197-080		C-CAP,S 0.01-25 K B	C816	87-010-197-080		C-CAP,S 0.01-25 K B
C374	87-010-197-080		C-CAP,S 0.01-25 K B	C817	87-010-404-080		CAP,E 4.7-50 SME
C376	87-010-318-080		C-CAP,S 47P-50 J CH	C818	87-010-196-080		C-CAP,S 0.1-25 Z F
C377	87-010-318-080		C-CAP,S 47P-50 J CH	C819	87-010-197-080		C-CAP,S 0.01-25 K B
C378	87-010-316-080		C-CAP,S 33P-50 J CH	C820	87-010-374-080		CAP,E 47-10 SME
C379	87-012-156-080		C-CAP,S 220P-50 J CH GRM	C821	87-010-402-080		CAP,E 2.2-50 SME
C381	87-010-196-080		C-CAP,S 0.1-25 Z F	C822	87-010-374-080		CAP,E 47-10 SME
C392	87-010-145-080		C-CAP,S 1P-50 CH	C823	87-010-196-080		C-CAP,S 0.1-25 Z F
C393	87-010-318-080		C-CAP,S 47P-50 J CH	C825	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C396	87-010-319-080		C-CAP,S 56P-50 J CH	C826	87-010-394-080		CAP,E 220-35 SME
C397	87-010-312-080		C-CAP,S 15P-50 J CH	C827	87-012-368-080		C-CAP,S 0.1-50 Z F
C399	87-010-196-080		C-CAP,S 0.1-25 Z F	C831	87-010-374-080		CAP,E 47-10 SME
C401	87-010-196-080		C-CAP,S 0.1-25 Z F	C832	87-010-197-080		C-CAP,S 0.01-25 K B
C403	87-010-401-080		CAP,E 1-50 SME	C833	87-010-194-080		C-CAP,S 0.047-25 K B
C404	87-012-155-080		C-CAP,S 180P-50 J CH GRM	C835	87-010-197-080		C-CAP,S 0.01-25 K B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C840	87-010-197-080		C-CAP,S 0.01-25 K B
C841	87-010-197-080		C-CAP,S 0.01-25 K B
C842	87-010-197-080		C-CAP,S 0.01-25 K B
D102	87-070-418-010		LED,LN66A RED
D103	87-070-288-010		LED,GL380
D104	87-070-288-010		LED,GL380
⚠F601	87-035-454-010		FUSE,1.6A 250V T 218
⚠F602	87-035-454-010		FUSE,1.6A 250V T 218
⚠FC601	87-A90-160-080		FUSE CLAMP,FC 51F
⚠FC602	87-A90-160-080		FUSE CLAMP,FC 51F
⚠FC603	87-A90-160-080		FUSE CLAMP,FC 51F
⚠FC604	87-A90-160-080		FUSE CLAMP,FC 51F
L101	87-005-432-080		COIL,10UH K FLR50
L102	87-005-440-080		COIL,47UH K FLR50
L103	87-005-440-080		COIL,47UH K FLR50
L104	87-005-440-080		COIL,47UH K FLR50
L105	87-005-432-080		COIL,10UH K FLR50
L106	87-005-647-080		COIL,10UH K LF5.0S
L107	87-005-440-080		COIL,47UH K FLR50
L108	87-005-647-080		COIL,10UH K LF5.0S
L301	87-005-686-080		COIL,15UH J LF5.0S
L302	87-005-684-080		COIL,10UH J LF5.0S
L303	87-005-691-080		COIL,39UH J LF5.0S
L304	87-005-440-080		COIL,47UH K FLR50
L305	87-005-440-080		COIL,47UH K FLR50
L307	87-005-686-080		COIL,15UH J LF5.0S
L308	87-005-686-080		COIL,15UH J LF5.0S
L309	87-005-692-080		COIL,47UH J LF5.0S
L310	87-005-700-080		COIL,220UH J LF5.0S
L311	87-005-688-080		COIL,22UH J LF5.0S
L313	87-005-691-080		COIL,39UH J LF5.0S
L314	87-005-692-080		COIL,47UH J LF5.0S
L315	87-005-688-080		COIL,22UH J LF5.0S
L316	87-005-700-080		COIL,220UH J LF5.0S
L323	87-005-695-080		COIL,82UH J LF5.0S
L325	87-005-688-080		COIL,22UH J LF5.0S
L326	87-005-440-080		COIL,47UH K FLR50
L327	87-005-694-080		COIL,68UH J LF5.0S
L328	87-005-440-080		COIL,47UH K FLR50
L330	87-005-839-080		COIL,5.6UH G LF5.0S
L331	87-005-440-080		COIL,47UH K FLR50
L801	87-005-440-080		COIL,47UH K FLR50
L802	87-005-440-080		COIL,47UH K FLR50
L803	87-005-440-080		COIL,47UH K FLR50
L804	87-005-440-080		COIL,47UH K FLR50
L805	87-005-432-080		COIL,10UH K FLR50
L806	87-005-440-080		COIL,47UH K FLR50
Q102	87-026-698-010		P-TR,PT-34R2S
Q105	87-026-698-010		P-TR,PT-34R2S
Q107	87-026-697-010		P-TR,PN168
Q109	87-026-697-010		P-TR,PN168
R611	87-A00-121-090		RES,M/F 3.9K-1W J
⚠R614	87-029-107-010		RES,FUSE 3.3-1/4W J
⚠R616	87-029-374-010		RES,FUSE 47-1/4W J
SFR101	87-024-172-080		SFR,10K DIA6V
SW101	87-A90-083-010		SW,PUSH MPU10480MLB
SW102	87-A90-083-010		SW,PUSH MPU10480MLB
SW801	87-A90-166-010		SW,SL SLD-12-500H
TU801	86-JU1-645-010		TU UNIT, TMUG4-104A BG
X101	87-A70-045-080		VIB,XTAL 16.0MHZ UNIDEN
X102	87-030-273-010		VIB,XTAL 32.768KHZ DT-38 5PPM
X301	87-A70-019-080		VIB,XTAL 4.43MHZ
X302	83-JU3-666-080		VIB,XTAL 17.73MHZ

FRONT-1 C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C901	87-010-079-080		CAP,E 100-6.3 5L SRE
C902	87-010-197-080		C-CAP,S 0.01-25 K B
C903	87-010-079-080		CAP,E 100-6.3 5L SRE
C904	87-010-197-080		C-CAP,S 0.01-25 K B
C905	87-018-134-080		CAP,TC-U 0.01-16 N Y UP050
C906	87-010-076-080		CAP,E 22-6.3 5L SRE
C907	87-010-071-080		CAP,E 1-50 5L SRE
C908	87-018-209-080		CAP,TC-U 0.1-50 Z F UP050
D921	87-A40-009-080		LED,SLP3117E-51ST1GR <2500Z,2500EH>
D922	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D923	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D924	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D925	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D926	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D927	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D928	87-A40-009-080		LED,SLP3117E-51ST1 GR <2500Z,2500EH>
D929	87-017-761-010		LED,GL3ED8 Y-GRN/RED <2500Z,2500EH>
D930	87-017-761-010		LED,GL3ED8 Y-GRN/RED <2500Z,2500EH>
FL901	86-JU1-641-010		FL,10BT-108GK
L901	87-005-684-080		COIL,10UH J LF5.0S
L902	87-005-684-080		COIL,10UH J LF5.0S
SW901	87-A90-137-010		SW,JOG HMW1103-21<3500Z,3500ED>
SW902	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>
SW903	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>
SW904	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
SW905	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
SW906	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>
SW907	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>
SW910	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
SW911	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
SW912	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
SW913	87-036-215-080		SW,TACT EVQ 214 04M <2500Z,2500EH>
X901	87-030-198-080		VIB,CER 4.000MHZ KBR MKS

FRONT-2 C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
D958	87-070-425-080		LED,SLZ-381B-02T-AB-T2 P-GRN
D959	87-A90-200-080		LED, SEL2910A-ORG TP <3500Z,3500ED>
SW951	87-036-215-080		SW,TACT EVQ 214 04M
SW952	87-036-215-080		SW,TACT EVQ 214 04M
SW953	87-036-215-080		SW,TACT EVQ 214 04M
SW954	87-036-215-080		SW,TACT EVQ 214 04M
SW955	87-036-215-080		SW,TACT EVQ 214 04M
SW956	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>
SW957	87-036-215-080		SW,TACT EVQ 214 04M <3500Z,3500ED>

FRONT-3 C.B<3500Z,3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C971	87-010-197-080		C-CAP,S 0.01-25 K B <3500Z,3500ED>
D971	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>
D972	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>
D973	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>
D974	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
D975	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>
D976	87-017-761-010		LED,GL3ED8 Y-GRN/RED <3500Z,3500ED>

HEAD AMP C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C501	87-010-182-080		C-CAP,S 2200P-50 K B
C502	87-010-196-080		C-CAP,S 0.1-25 Z F
C503	87-010-317-080		C-CAP,S 39P-50 J CH
C505	87-010-196-080		C-CAP,S 0.1-25 Z F
C506	87-010-196-080		C-CAP,S 0.1-25 Z F
C507	87-010-196-080		C-CAP,S 0.1-25 Z F
C508	87-010-196-080		C-CAP,S 0.1-25 Z F
C509	87-010-317-080		C-CAP,S 39P-50 J CH
C510	87-010-314-080		C-CAP,S 22P-50 J CH
C511	87-010-314-080		C-CAP,S 22P-50 J CH
C512	87-010-196-080		C-CAP,S 0.1-25 Z F
C513	87-015-677-080		CAP,E 100-6.3 7L SRA
C514	87-010-805-080		C-CAP,S 1-16 Z F
C515	87-010-198-080		C-CAP,S 0.022-25 K B
C516	87-010-198-080		C-CAP,S 0.022-25 K B
C520	87-010-196-080		C-CAP,S 0.1-25 Z F
C521	87-010-312-080		C-CAP,S 15P-50 J CH
C522	87-010-312-080		C-CAP,S 15P-50 J CH
C524	87-010-198-080		C-CAP,S 0.022-25 K B
C525	87-010-317-080		C-CAP,S 39P-50 J CH
C526	87-010-196-080		C-CAP,S 0.1-25 Z F
C527	87-010-196-080		C-CAP,S 0.1-25 Z F
C528	87-010-196-080		C-CAP,S 0.1-25 Z F
C552	87-010-197-080		C-CAP,S 0.01-25 K B
C553	87-010-197-080		C-CAP,S 0.01-25 K B
C554	87-010-197-080		C-CAP,S 0.01-25 K B
C555	87-010-196-080		C-CAP,S 0.1-25 Z F
C556	87-015-684-080		CAP,E 47-16 7L SRA
C557	87-010-154-080		C-CAP,S 10P-50 D CH
C558	87-010-196-080		C-CAP,S 0.1-25 Z F
C559	87-010-196-080		C-CAP,S 0.1-25 Z F
C560	87-010-197-080		C-CAP,S 0.01-25 K B
C561	87-010-197-080		C-CAP,S 0.01-25 K B
C562	87-010-197-080		C-CAP,S 0.01-25 K B
C563	87-010-196-080		C-CAP,S 0.1-25 Z F
C565	87-010-316-080		C-CAP,S 33P-50 J CH
FCB702	86-JU1-654-010		F-CABLE, HA
L501	87-005-440-080		COIL,47UH K FLR50
L503	87-005-685-080		COIL,12UH J LF5.0S
L504	87-005-692-080		COIL,47UH J LF5.0S
L551	87-005-444-080		COIL,100UH K FLR50

JACK C.B<3500Z,3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C772	87-010-176-080		C-CAP,S 680P-50 J SL <3500Z,3500ED>
C773	87-010-176-080		C-CAP,S 680P-50 J SL <3500Z,3500ED>
C774	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
FCB701	86-JU1-653-010		F-CABLE, FRONT<3500Z,3500ED>
J701	87-099-632-010		JACK,PIN 3P R/W/Y<3500Z,3500ED>

HIFI/CANAL-1 C.B<3500Z,3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C1	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C2	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C3	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C4	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C5	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C6	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C7	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C8	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C9	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C10	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C12	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C14	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C15	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C16	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C17	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C18	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C19	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C20	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C23	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C24	87-A10-205-080		CAP,E 470-6.3 SRG <3500Z,3500ED>
C25	87-015-695-080		CAP,E 1-50 7L SRA <3500Z,3500ED>
C26	87-015-695-080		CAP,E 1-50 7L SRA<3500Z,3500ED>
C27	87-015-696-080		CAP,E 2.2-50 7L SRA <3500Z,3500ED>
C28	87-015-677-080		CAP,E 100-6.3 7L SRA <3500Z,3500ED>
C29	87-010-196-080		C-CAP,S 0.1-25 Z F <3500Z,3500ED>
C30	87-015-695-080		CAP,E 1-50 7L SRA<3500Z,3500ED>
C33	87-A10-205-080		CAP,E 470-6.3 SRG<3500Z,3500ED>
C34	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C36	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C38	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C39	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C40	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C41	87-012-154-080		C-CAP,S 150P-50 J CH GRM <3500Z,3500ED>
C42	87-010-197-080		C-CAP,S 0.01-25 K B <3500Z,3500ED>
C43	87-010-197-080		C-CAP,S 0.01-25 K B <3500Z,3500ED>
C45	87-015-681-080		CAP,E 10-16 7L SRA <3500Z,3500ED>
C46	87-015-692-080		CAP,E 0.22-50 7L SRA <3500Z,3500ED>
C47	87-010-405-080		CAP,E 10-50 SME<3500Z,3500ED>
C48	87-010-060-080		CAP,E 100-16 7L SRA <3500Z,3500ED>
C49	87-010-405-080		CAP,E 10-50 SME<3500Z,3500ED>
C50	87-010-401-080		CAP,E 1-50 SME<3500Z,3500ED>
C51	87-010-405-080		CAP,E 10-50 SME<3500Z,3500ED>
C52	87-010-405-080		CAP,E 10-50 SME<3500Z,3500ED>
C53	87-015-688-080		CAP,E 4.7-35 7L SRA <3500Z,3500ED>
C54	87-015-695-080		CAP,E 1-50 7L SRA<3500Z,3500ED>
C55	87-010-401-080		CAP,E 1-50 SME<3500Z,3500ED>
C56	87-010-401-080		CAP,E 1-50 SME<3500Z,3500ED>
C57	87-015-692-080		CAP,E 0.22-50 7L SRA <3500Z,3500ED>

REF.NO	PART NO.	カンリ NO.	DESCRIPTION
C58	87-010-401-080		CAP,E 1-50 SME<3500Z,3500ED>
C59	87-010-546-080		CAP,E 0.33-50 SME<3500Z,3500ED>
C60	87-010-380-080		CAP,E 47-16 SME<3500Z,3500ED>
C61	87-010-401-080		CAP,E 1-50 SME<3500Z,3500ED>
C62	87-015-695-080		CAP,E 1-50 7L SRA<3500Z,3500ED>
C63	87-010-380-080		CAP,E 47-16 SME<3500Z,3500ED>
C65	87-010-405-080		CAP,E 10-50 SME<3500Z,3500ED>
C66	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C67	87-010-182-080		C-CAP,S 2200P-50 K B <3500Z,3500ED>
C68	87-010-182-080		C-CAP,S 2200P-50 K B <3500Z,3500ED>
C99	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C703	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C704	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C705	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C706	87-015-684-080		CAP,E 47-16 7L SRA<3500Z,3500ED>
C707	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C708	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C709	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C710	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C711	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C712	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C713	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C714	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C715	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C716	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C717	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C718	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C719	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C720	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C721	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C722	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C723	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C724	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C725	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C726	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C727	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C728	87-010-194-080		C-CAP,S 0.047-25 K F <3500Z,3500ED>
C729	87-010-197-080		C-CAP,S 0.01-25 K B <3500Z,3500ED>
C730	87-010-198-080		C-CAP,S 0.022-25 K B <3500Z,3500ED>
C731	87-010-183-080		C-CAP,S 2700P-50 K B <3500Z,3500ED>
C732	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C733	87-015-688-080		CAP,E 4.7-35 7L SRA <3500Z,3500ED>
C734	87-010-180-080		C-CAP,S 1500P-50 K B <3500Z,3500ED>
C735	87-A10-202-080		CAP,E 47-16 105 KRL <3500Z,3500ED>
C736	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C737	87-010-186-080		C-CAP,S 4700P-50 K B <3500Z,3500ED>
C738	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C739	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C740	87-015-696-080		CAP,E 2.2-50 7L SRA <3500Z,3500ED>

REF.NO	PART NO.	カンリ NO.	DESCRIPTION
C741	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C742	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C743	87-010-186-080		C-CAP,S 4700P-50 K B <3500Z,3500ED>
C744	87-012-141-080		C-CAP,S 0.22-16 Z F <3500Z,3500ED>
C745	87-015-684-080		CAP,E 47-16 7L SRA<3500Z,3500ED>
C746	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C747	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C748	87-010-198-080		C-CAP,S 0.022-25 K B <3500Z,3500ED>
C749	87-010-198-080		C-CAP,S 0.022-25 K B <3500Z,3500ED>
C750	87-015-684-080		CAP,E 47-16 7L SRA<3500Z,3500ED>
C751	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C752	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C753	87-010-322-080		C-CAP,S 100P-50 J CH <3500Z,3500ED>
C754	87-015-696-080		CAP,E 2.2-50 7L SRA <3500Z,3500ED>
C755	87-015-681-080		CAP,E 10-16 7L SRA<3500Z,3500ED>
C756	87-010-178-080		C-CAP,S 1000P-50 K B <3500Z,3500ED>
C757	87-A10-212-080		CAP,M 0.022-100 J<3500Z,3500ED>
C758	87-012-156-080		C-CAP,S 220P-50 J CH GRM <3500Z,3500ED>
C759	87-015-684-080		CAP,E 47-16 7L SRA<3500Z,3500ED>
C760	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C761	87-010-182-080		C-CAP,S 2200P-50 K B <3500Z,3500ED>
C770	87-015-684-080		CAP,E 47-16 7L SRA<3500Z,3500ED>
C771	87-010-197-080		C-CAP,S 0.01-25 K B <3500Z,3500ED>
C777	87-015-688-080		CAP,E 4.7-35 7L SRA <3500Z,3500ED>
C790	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
C791	87-010-196-080		C-CAP,S 0.1-25 Z F<3500Z,3500ED>
FB1	87-003-223-080		F-BEAD, BL02RN2<3500Z,3500ED>
J1	87-A60-239-010		JACK,PIN 4P 01244N<3500Z,3500ED>
L1	87-005-444-080		COIL,100UH K FLR50<3500Z,3500ED>
L701	87-005-684-080		COIL,10UH J LF5.0S<3500Z,3500ED>
L702	87-003-131-080		COIL,10MH J EL0607<3500Z,3500ED>
L703	87-005-152-080		COIL,10UH K LAL03<3500Z,3500ED>
L704	87-005-684-080		COIL,10UH J LF5.0S<3500Z,3500ED>
L705	87-005-684-080		COIL,10UH J LF5.0S<3500Z,3500ED>
L706	87-005-684-080		COIL,10UH J LF5.0S<3500Z,3500ED>
L707	86-JU1-655-010		COIL,BIAS AE<3500Z,3500ED>
L708	86-JU1-652-010		COIL,BIAS K7-T3<3500Z,3500ED>

HIFI/CANAL-2 C.B<2500Z,2500EH>

REF.NO	PART NO.	カンリ NO.	DESCRIPTION
C1	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C2	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C3	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C4	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C5	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C6	87-012-154-080		C-CAP,S 150P-50 J CHGRM <2500Z,2500EH>
C7	87-012-154-080		C-CAP,S 150P-50 J CHGRM <2500Z,2500EH>
C8	87-012-154-080		C-CAP,S 150P-50 J CHGRM <2500Z,2500EH>
C9	87-012-154-080		C-CAP,S 150P-50 J CHGRM <2500Z,2500EH>
C10	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C12	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C14	87-012-154-080		C-CAP,S 150P-50 J CHGRM <2500Z,2500EH>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C15	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C16	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C17	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C18	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C19	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C20	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C23	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C24	87-A10-205-080		CAP,E 470-6.3 SRG<2500Z,2500EH>
C25	87-015-695-080		CAP,E 1-50 7L SRA<2500Z,2500EH>
C26	87-015-695-080		CAP,E 1-50 7L SRA<2500Z,2500EH>
C27	87-015-696-080		CAP,E 2.2-50 7L SRA <2500Z,2500EH>
C28	87-015-677-080		CAP,E 100-6.3 7L SRA <2500Z,2500EH>
C29	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C30	87-015-695-080		CAP,E 1-50 7L SRA<2500Z,2500EH>
C33	87-A10-205-080		CAP,E 470-6.3 SRG<2500Z,2500EH>
C34	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C36	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C38	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C39	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C40	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C41	87-012-154-080		C-CAP,S 150P-50 J CH GRM <2500Z,2500EH>
C42	87-010-197-080		C-CAP,S 0.01-25 K B <2500Z,2500EH>
C43	87-010-197-080		C-CAP,S 0.01-25 K B <2500Z,2500EH>
C99	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C703	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C704	87-018-209-080		CAP,TC-U 0.1-50 Z F UP050 <2500Z,2500EH>
C705	87-018-209-080		CAP,TC-U 0.1-50 Z F UP050 <2500Z,2500EH>
C706	87-015-684-080		CAP,E 47-16 7L SRA<2500Z,2500EH>
C707	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C708	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C709	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C710	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C711	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C712	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C713	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C714	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C715	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C716	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C717	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C718	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C721	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C723	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C724	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C725	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C726	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C727	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C728	87-010-194-080		C-CAP,S 0.047-25 K F <2500Z,2500EH>
C729	87-010-197-080		C-CAP,S 0.01-25 K B <2500Z,2500EH>
C730	87-010-198-080		C-CAP,S 0.022-25 K B <2500Z,2500EH>
C731	87-010-183-080		C-CAP,S 2700P-50 K B <2500Z,2500EH>
C732	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C733	87-015-688-080		CAP,E 4.7-35 7L SRA <2500Z,2500EH>
C734	87-010-180-080		C-CAP,S 1500P-50 K B <2500Z,2500EH>
C735	87-A10-202-080		CAP,E 47-16 105 KRL <2500Z,2500EH>
C736	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C737	87-010-186-080		C-CAP,S 4700P-50 K B <2500Z,2500EH>
C738	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C739	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C740	87-015-696-080		CAP,E 2.2-50 7L SRA <2500Z,2500EH>
C741	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C742	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C743	87-010-186-080		C-CAP,S 4700P-50 K B <2500Z,2500EH>
C744	87-012-141-080		C-CAP,S 0.22-16 Z F <2500Z,2500EH>
C745	87-015-684-080		CAP,E 47-16 7L SRA<2500Z,2500EH>
C746	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C747	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C748	87-018-205-080		CAP,TC-U 0.022-25 Z F TP <2500Z,2500EH>
C749	87-018-205-080		CAP,TC-U 0.022-25 Z F TP <2500Z,2500EH>
C750	87-015-684-080		CAP,E 47-16 7L SRA<2500Z,2500EH>
C751	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C752	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
C753	87-010-322-080		C-CAP,S 100P-50 J CH <2500Z,2500EH>
C754	87-015-696-080		CAP,E 2.2-50 7L SRA <2500Z,2500EH>
C755	87-015-681-080		CAP,E 10-16 7L SRA<2500Z,2500EH>
C756	87-010-178-080		C-CAP,S 1000P-50 K B <2500Z,2500EH>
C758	87-012-156-080		C-CAP,S 220P-50 J CH GR <2500Z,2500EH>
C770	87-015-684-080		CAP,E 47-16 7L SRA <2500Z,2500EH>
C771	87-010-197-080		C-CAP,S 0.01-25 K B <2500Z,2500EH>
C790	87-010-196-080		C-CAP,S 0.1-25 Z F<2500Z,2500EH>
FB1	87-003-223-080		F-BEAD, BL02RN2<2500Z,2500EH>
J1	87-A60-239-010		JACK,PIN 4P 01244N<2500Z,2500EH>
L1	87-005-444-080		COIL,100UH K FLR50<2500Z,2500EH>
L701	87-005-684-080		COIL,10UH J LF5.0S<2500Z,2500EH>
L702	87-003-131-080		COIL,10MH J EL0607<2500Z,2500EH>
L703	87-005-152-080		COIL,10UH K LAL03<2500Z,2500EH>
L704	87-005-684-080		COIL,10UH J LF5.0S<2500Z,2500EH>
L707	85-JU7-631-010		COIL,OSC7 70KHZ<2500Z,2500EH>

ZWEITON C.B<EXCEPT 3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C451	87-010-196-080		C-CAP,S 0.1-25 Z F <EXCEPT 3500ED>
C452	87-010-248-080		CAP,E 220-10 SME<EXCEPT 3500ED>
C453	87-010-428-080		C-CAP,S 0.015<EXCEPT 3500ED>
C454	87-010-428-080		C-CAP,S 0.015<EXCEPT 3500ED>
C455	87-010-263-080		CAP,E 100-10 SME<EXCEPT 3500ED>
C458	87-010-178-080		C-CAP,S 1000P-50 K B <EXCEPT 3500ED>
C459	87-015-689-080		CAP,E 10-35 7L SRA <EXCEPT 3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C460	87-010-197-080		C-CAP,S 0.01-25 K B <EXCEPT 3500ED>
C461	87-010-196-080		C-CAP,S 0.1-25 Z F <EXCEPT 3500ED>
C462	87-010-263-080		CAP,E 100-10 SME <EXCEPT 3500ED>
C463	87-010-402-080		CAP,E 2.2-50 SME<EXCEPT 3500ED>
C464	87-010-318-080		C-CAP,S 47P-50 J CH <EXCEPT 3500ED>
C465	87-010-402-080		CAP,E 2.2-50 SME<EXCEPT 3500ED>
C468	87-010-178-080		C-CAP,S 1000P-50 K B <EXCEPT 3500ED>
C477	87-010-197-080		C-CAP,S 0.01-25 K B <EXCEPT 3500ED>
C479	87-010-197-080		C-CAP,S 0.01-25 K B <EXCEPT 3500ED>
C482	87-010-196-080		C-CAP,S 0.1-25 Z F <EXCEPT 3500ED>
C483	87-018-134-080		CAP,TC-U 0.01-16 N Y UP050 <EXCEPT 3500ED>
C484	87-010-316-080		C-CAP,S 33P-50 J CH <EXCEPT 3500ED>
C485	87-010-404-080		CAP,E 4.7-50 SME<EXCEPT 3500ED>
C486	87-010-317-080		C-CAP,S 39P-50 J CH <EXCEPT 3500ED>
C487	87-018-114-080		CAP,TC-U 39P-50 J SL UP050 <EXCEPT 3500ED>
C490	87-010-321-080		C-CAP,S 82P-50 J CH <EXCEPT 3500ED>
C491	87-010-320-080		C-CAP,S 68P-50 J CH <EXCEPT 3500ED>
C492	87-010-197-080		C-CAP,S 0.01-25 K B <EXCEPT 3500ED>
C493	87-010-196-080		C-CAP,S 0.1-25 Z F <EXCEPT 3500ED>
L451	87-005-485-080		COIL,100UH J FLR50 <EXCEPT 3500ED>
L454	87-005-485-080		COIL,100UH J FLR50 <EXCEPT 3500ED>
L455	87-005-684-080		COIL,10UH J LF5.0S <EXCEPT 3500ED>
L456	87-A50-097-010		COIL,126ANS-A3561HM <EXCEPT 3500ED>
SFR451	87-024-272-080		SFR,10K V RH0632C<EXCEPT 3500ED>
X451	87-A70-041-080		VIB,XTAL 10MHZ<EXCEPT 3500ED>
X453	87-A90-184-080		FLTR, SFE5.74MC2<EXCEPT 3500ED>
X454	87-A90-204-080		FLTR,CER CDSH5.74MC39K <EXCEPT 3500ED>

NICAM C.B<3500ED>

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
C651	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C652	87-010-374-080		CAP,E 47-10 SME<3500ED>
C653	87-010-197-080		C-CAP,S 0.01-25 K B<3500ED>
C655	87-010-545-080		CAP,E 0.22-50 SME<3500ED>
C657	87-010-178-080		C-CAP,S 1000P-50 K B<3500ED>
C658	87-010-374-080		CAP,E 47-10 SME<3500ED>
C659	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C660	87-010-178-080		C-CAP,S 1000P-50 K B<3500ED>
C663	87-010-545-080		CAP,E 0.22-50 SME<3500ED>
C664	87-010-194-080		C-CAP,S 0.047-25 K F<3500ED>
C665	87-010-405-080		CAP,E 10-50 SME<3500ED>
C666	87-010-374-080		CAP,E 47-10 SME<3500ED>
C667	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C669	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C670	87-010-405-080		CAP,E 10-50 SME<3500ED>
C671	87-010-154-080		C-CAP,S 10P-50 D CH<3500ED>
C672	87-010-405-080		CAP,E 10-50 SME<3500ED>
C673	87-012-156-080		C-CAP,S 220P-50 J CH GRM<3500ED>
C674	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C675	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C676	87-010-405-080		CAP,E 10-50 SME<3500ED>
C677	87-010-401-080		CAP,E 1-50 SME<3500ED>
C680	87-010-322-080		C-CAP,S 100P-50 J CH<3500ED>
C681	87-010-322-080		C-CAP,S 100P-50 J CH<3500ED>
C683	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C684	87-010-374-080		CAP,E 47-10 SME<3500ED>
C685	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C688	87-016-087-080		C-CAP,S 0.47-16 FZ<3500ED>
C689	87-010-197-080		C-CAP,S 0.01-25 K B<3500ED>
C690	87-010-197-080		C-CAP,S 0.01-25 K B<3500ED>
C691	87-010-374-080		CAP,E 47-10 SME<3500ED>
C692	87-018-134-080		CAP,TC-U 0.01-16 N Y UP050 <3500ED>
C693	87-010-197-080		C-CAP,S 0.01-25 K B<3500ED>
C694	87-010-196-080		C-CAP,S 0.1-25 Z F<3500ED>
C695	87-010-374-080		CAP,E 47-10 SME<3500ED>
D652	87-020-743-080		VARI-CAP,MA341BTX<3500ED>
L651	87-005-444-080		COIL,100UH K FLR50<3500ED>
L652	87-005-444-080		COIL,100UH K FLR50<3500ED>
L653	87-005-471-080		COIL,6.8UH J FLR50<3500ED>
L654	87-005-444-080		COIL,100UH K FLR50<3500ED>
X651	87-A70-029-080		VIB,XTAL 8.192MHZ<3500ED>

POWER-1 C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
⚠F641	87-035-449-010		FUSE,500MA 250V T 218
⚠FC641	87-A90-160-080		FUSE CLAMP,FC 51F
⚠FC642	87-A90-160-080		FUSE CLAMP,FC 51F
⚠J641	87-A60-021-010		JACK,AC E HJC-028
⚠L641	87-030-274-010		FLTR,LINE LF-4D-333
⚠L642	87-A90-227-010		FLTR,27UH LU-10H-270A

POWER-2 C.B

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
⚠PT641	86-JU1-630-010		PT,KE

FE C.B

BASE C.B

CM C.B

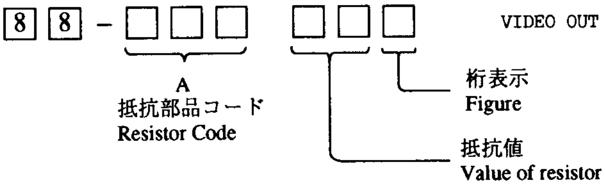
DM LEAD C.B

ACE HEAD C.B

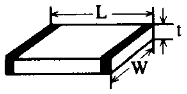
VIDEO OUT C.B

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

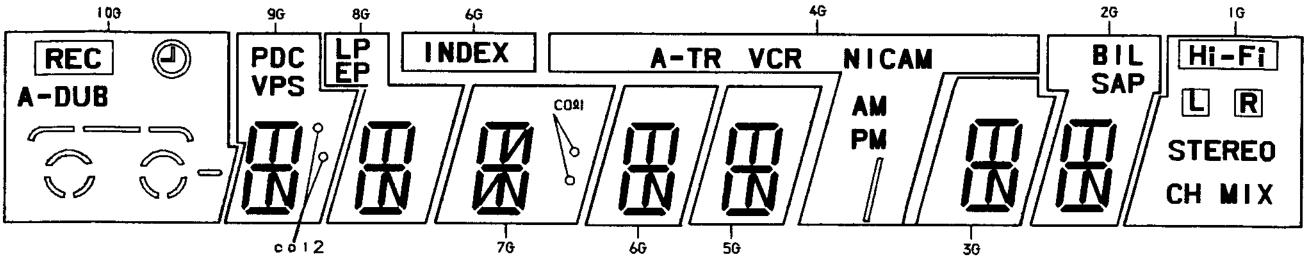


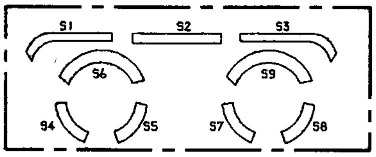
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード ：A Resistor Code ：A
				外形／Form	L	W	t	
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

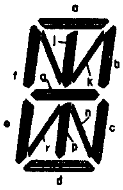
FL DISPLAY

GRID ASSIGNMENT


10G
9G
8G
6G
4G
2G
1G
REC
A-DUB
PDC
VPS
LP
EP
INDEX
A-TR VCR NICAM
COΩ1
AM
PM
BIL
SAP
Hi-Fi
L
R
STEREO
CH MIX
COΩ2
7G
6G
5G
3G


S1
S2
S3
S6
S9
S4
S5
S7
S8

(10G)

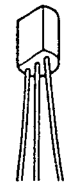

a
j
b
f
q
k
g
c
n
r
p
d

(9G～5G . 3G～2G)

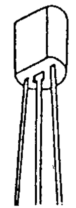
ANODE CONNECTION

	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	S1	a	a	a	a	a	I	a	a	—
P2	S2	j	j	j	j	j	A	j	j	—
P3	S3	b	b	b	b	b	M (UP)	b	b	—
P4	S4	f	f	f	f	f	P (DOWN)	f	f	—
P5	S5	g	g	g	g	g	M	g	g	—
P6	S6	c	c	c	c	c	NICOM	c	c	—
P7	S7	•	•	•	•	•	A-TR	•	•	—
P8	S8	p	p	p	p	p	VCR	p	p	HI-FI
P9	S9	n	n	n	n	n	—	n	n	L
P10	▭	d	d	d	d	d	—	d	d	R
P11	A-DUB	VPS	—	r	INDEX	—	—	—	BIL	STEREO
P12	◷	PDC	LP	k	—	—	—	—	SAP	MIX
P13	REC	COΩ2	EP	COΩ1	—	—	—	—	—	CH

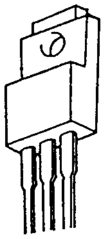
TRANSISTOR ILLUSTRATION



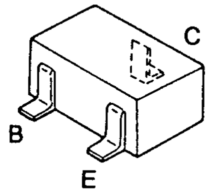
2SA952
2SA1296
2SA1318
2SC1815
2SC3331



2SA934

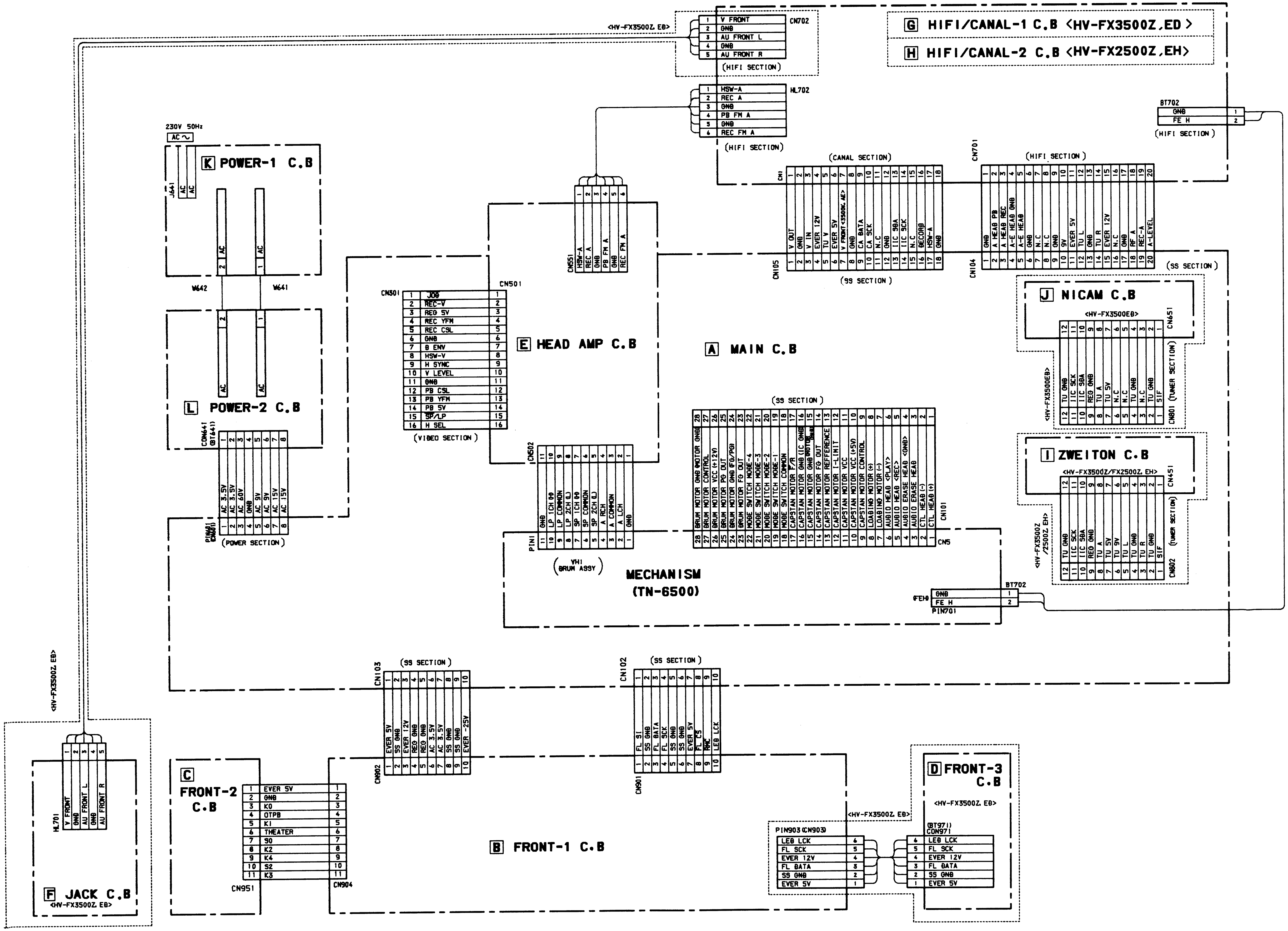


2SB1565
2SD2394

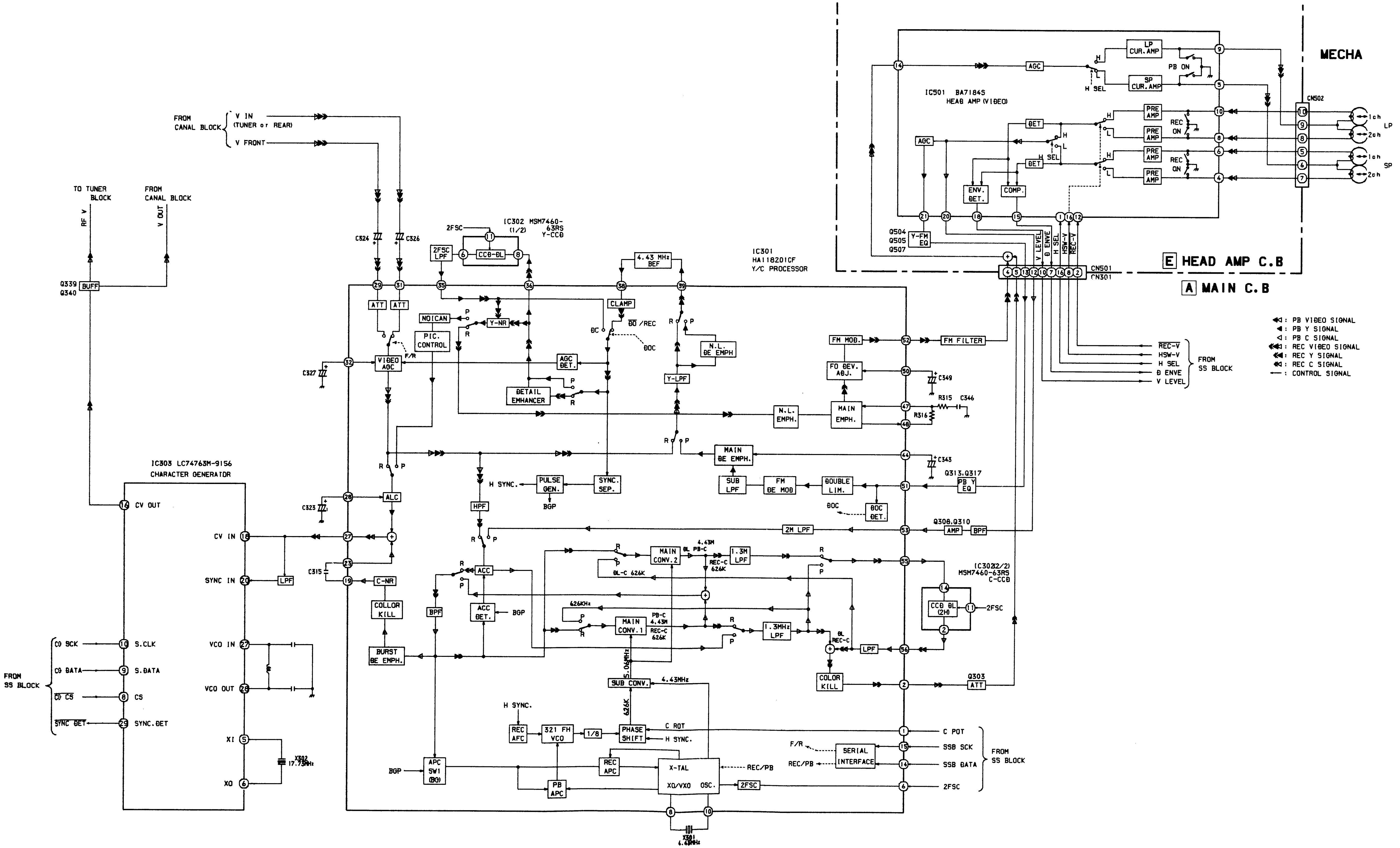


2SA1037K
2SA1162
2SC2412K
DTA144EK
DTC114YK
DTC144EK

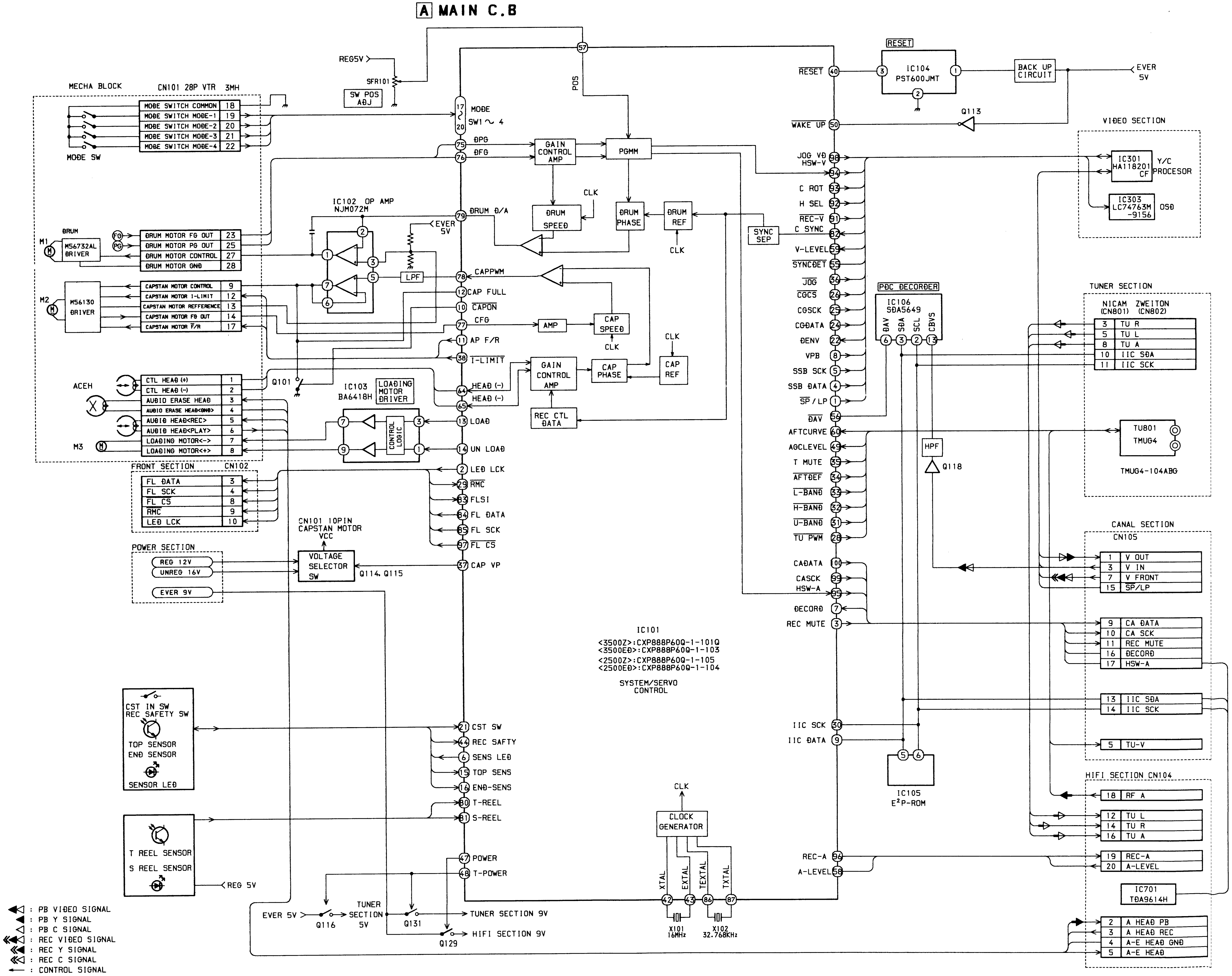
WIRE HARNESS DIAGRAM


G HIFI/CANAL-1 C.B <HV-FX3500Z,ED>
H HIFI/CANAL-2 C.B <HV-FX2500Z,EH>
K POWER-1 C.B
L POWER-2 C.B
E HEAD AMP C.B
A MAIN C.B
J NICAM C.B
I ZWEITON C.B
MECHANISM (TN-6500)
C FRONT-2 C.B
B FRONT-1 C.B
D FRONT-3 C.B
F JACK C.B
230V 50Hz
AC
CN702
HL702
BT702
CN501
CN551
CN502
PIN1
CN641 (BT641)
PIN901 CN901
W642
W641
J641
CN1
CN105
CN701
CN104
CN651
CN801
CN451
CN802
CN101
CN5
PIN701
CN103
CN902
CN102
CN901
CN951
CN904
PIN903 (CN903)
(BT971) CN971
HL701
(HIFI SECTION)
(CANAL SECTION)
(SS SECTION)
(VIDEO SECTION)
(POWER SECTION)
(TUNER SECTION)
VH1 DRUM ASSY
<HV-FX3500Z EB>
<HV-FX3500Z/FX2500Z, EH>
<HV-FX3500Z, ED>
EVER 5V
SS GND
EVER 12V
REG GND
AC 3.5V
EVER -25V
FL SI
FL DATA
FL SCK
LED LCK
KO
OTPB
K1
THEATER
SO
K2
K4
S2
K3
V FRONT
GND
AU FRONT L
AU FRONT R
HSW-A
REC A
PB FM A
REC FM A
FE H
JOG
REC-V
REG 5V
REC YFM
REC CSL
D ENV
HSW-V
H SYNC
V LEVEL
PB CSL
PB YFM
PB 5V
SP/LP
H SEL
AC 60V
AC 9V
AC 15V
LP 1CH
LP COMMON
LP 2CH
SP 1CH
SP COMMON
SP 2CH
A RCH
A COMMON
A LCH
TU GND
IIC SCK
IIC SDA
TU A
TU 5V
TU 9V
TU L
TU R
N.C
SIF

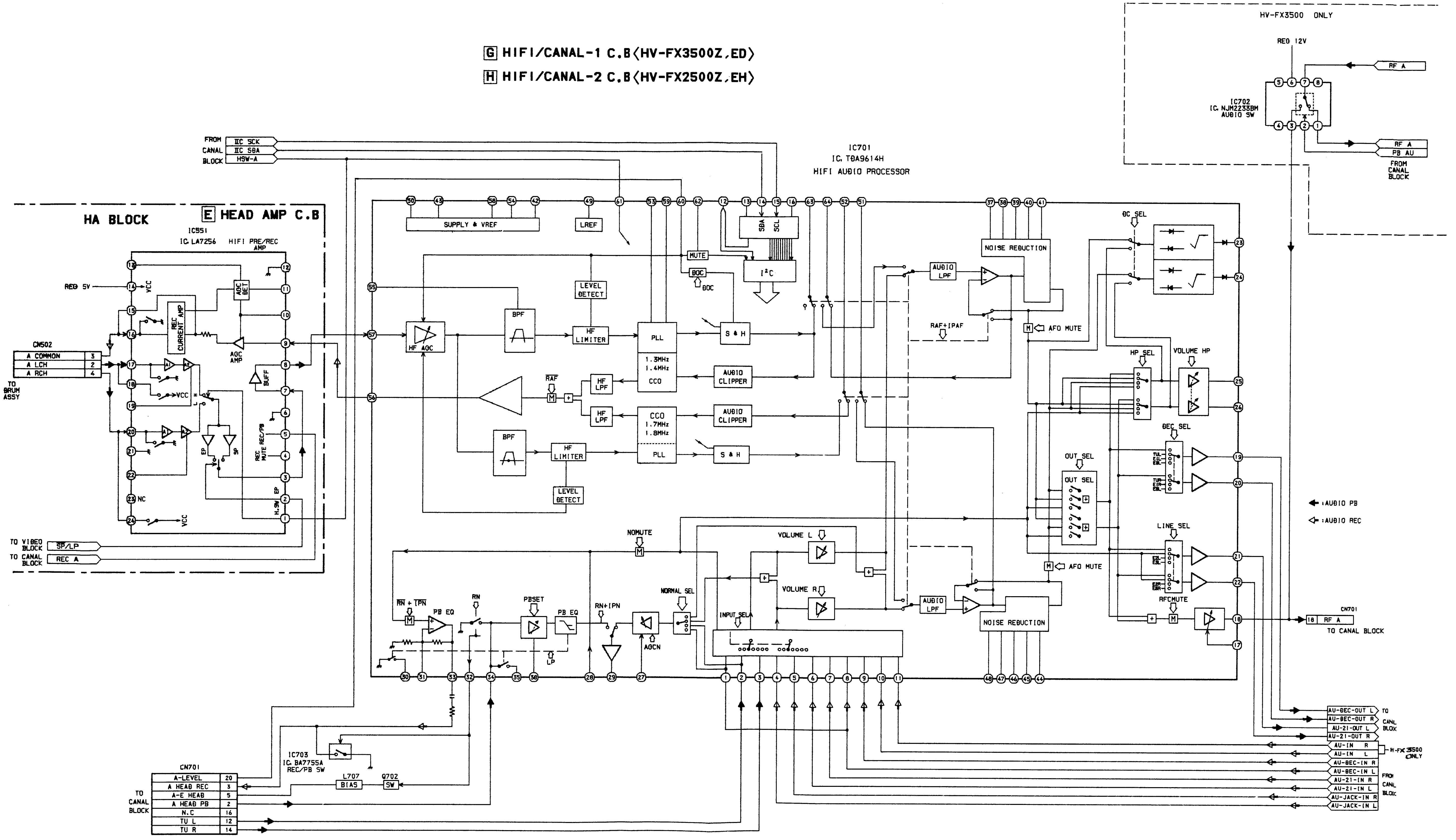
BLOCK DIAGRAM – 1 (VIDEO SECTION)


MECHA
CN502
1ch
2ch
LP
SP
LP CUR.AMP
SP CUR.AMP
PB ON
AGC
H SEL
IC501 BA7184S
HEAD AMP (VIDEO)
PRE AMP
REC ON
DET
ENV. DET.
COMP.
Q504
Q505
Q507
Y-FM EQ
V LEVEL
D ENVE
H SEL
HSW-V
REC-V
CN501
CN301
E HEAD AMP C.B
A MAIN C.B
◀◀: PB VIDEO SIGNAL
◀: PB Y SIGNAL
◁: PB C SIGNAL
◀◀: REC VIDEO SIGNAL
◀◀: REC Y SIGNAL
◀◀: REC C SIGNAL
—: CONTROL SIGNAL
REC-V
HSW-V
H SEL
D ENVE
V LEVEL
FROM SS BLOCK
FROM CANAL BLOCK
V IN (TUNER or REAR)
V FRONT
TO TUNER BLOCK
RF V
FROM CANAL BLOCK
V OUT
Q339
Q340
BUFF
C324
C326
2FSC
IC302 MSM7460-63RS (1/2) Y-CCD
2FSC LPF
CCD-DL
4.43 MHz DEF
IC301
HA118201CF
Y/C PROCESSOR
ATT
CLAMP
DO /REC
DOC
NOICAN
Y-NR
PIC. CONTROL
F/R
VIDEO AGC
C327
AGC DET.
DETAIL EMHANCER
N.L. DE EMPH
Y-LPF
FM MOD.
FM FILTER
FO DEV. ADJ.
C349
R315 C346
R316
N.L. EMPH.
MAIN EMPH.
MAIN DE EMPH.
C343
Q313,Q317
PB Y EQ
SUB LPF
FM DE MOD
DOUBLE LIM.
DOC DET.
H SYNC.
PULSE GEN.
SYNC. SEP.
BGP
HPF
ALC
C323
C315
2M LPF
Q308,Q310
AMP
BPF
MAIN CONV.2
DL PB-C
4.43M
REC-C 626K
1.3M LPF
DL-C 626K
IC302(2/2)
MSM7460-63RS
C-CCD
CCD DL (2H)
2FSC
ACC
ACC DET.
C-NR
COLLOR KILL
BPF
626KHz
MAIN CONV.1
PB-C 4.43M
REC-C 626K
1.3MHz LPF
DL REC-C
LPF
COLOR KILL
Q303
ATT
BURST DE EMPH.
SUB CONV.
4.43MHz
5.06MHz
626K
H SYNC.
REC AFC
321 FH VCO
1/8
PHASE SHIFT
C ROT
APC SW1 (DG)
REC APC
PB APC
X-TAL
XO/VXO OSC.
REC/PB
2FSC
F/R
SERIAL INTERFACE
C ROT
SSB SCK
SSB DATA
2FSC
FROM SS BLOCK
X301 4.43MHz
IC303 LC74763M-9156
CHARACTER GENERATOR
CV OUT
CV IN
SYNC IN
LPF
S.CLK
S.DATA
CS
SYNC.DET
VCO IN
VCO OUT
XI
XO
X302 17.73MHz
CD SCK
CD DATA
CD CS
SYNC DET
FROM SS BLOCK
R
P
H
L

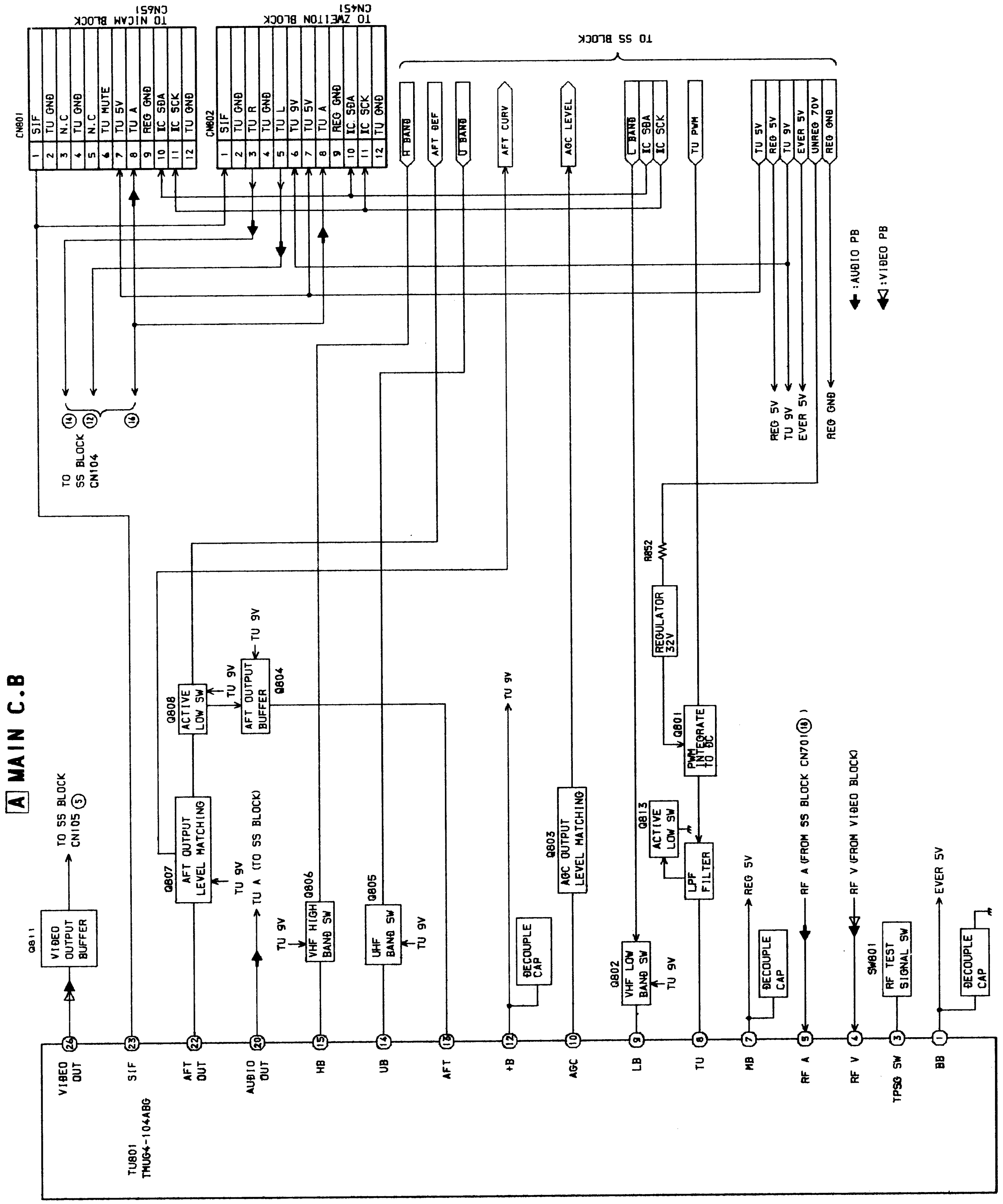
BLOCK DIAGRAM – 2 (SYSTEM CONTROL/SERVO SECTION)


A MAIN C.B
MECHA BLOCK
CN101 28P VTR 3MH
MODE SWITCH COMMON 18
MODE SWITCH MODE-1 19
MODE SWITCH MODE-2 20
MODE SWITCH MODE-3 21
MODE SWITCH MODE-4 22
MODE SW
DRUM
M1
M56732AL DRIVER
DRUM MOTOR FG OUT 23
DRUM MOTOR PG OUT 25
DRUM MOTOR CONTROL 27
DRUM MOTOR GND 28
M2
M56130 DRIVER
CAPSTAN MOTOR CONTROL 9
CAPSTAN MOTOR I-LIMIT 12
CAPSTAN MOTOR REFFERENCE 13
CAPSTAN MOTOR FG OUT 14
CAPSTAN MOTOR F/R 17
ACEH
CTL HEAD (+) 1
CTL HEAD (-) 2
AUDIO ERASE HEAD 3
AUDIO ERASE HEAD<GND> 4
AUDIO HEAD<REC> 5
AUDIO HEAD<PLAY> 6
LOADING MOTOR<-> 7
LOADING MOTOR<+> 8
M3
FRONT SECTION CN102
FL DATA 3
FL SCK 4
FL CS 8
RMC 9
LED LCK 10
POWER SECTION
REG 12V
UNREG 16V
EVER 9V
CN101 10PIN CAPSTAN MOTOR VCC
VOLTAGE SELECTOR SW
Q114, Q115
REG5V
SFR101
SW POS ADJ
IC102 OP AMP NJM072M
EVER 5V
LPF
IC103 BA6418H
LOADING MOTOR DRIVER
CONTROL LOGIC
Q101
GAIN CONTROL AMP
PGMM
DRUM SPEED
DRUM PHASE
DRUM REF
CLK
SYNC SEP
AMP
CAP SPEED
GAIN CONTROL AMP
CAP PHASE
CAP REF
REC CTL DATA
POS
57
17~20 MODE SW1~4
75 DPG
76 DFG
79 DRUM D/A
78 CAPPWM
12 CAP FULL
10 CAPON
77 CFG
11 AP F/R
38 I-LIMIT
64 HEAD (-)
65 HEAD (-)
13 LOAD
14 UN LOAD
2 LED LCK
29 RMC
83 FLSI
84 FL DATA
85 FL SCK
97 FL CS
37 CAP VP
CST IN SW
REC SAFETY SW
TOP SENSOR
END SENSOR
SENSOR LED
21 CST SW
44 REC SAFTY
6 SENS LED
15 TOP SENS
16 END-SENS
T REEL SENSOR
S REEL SENSOR
REG 5V
80 T-REEL
81 S-REEL
47 POWER
48 T-POWER
EVER 5V
Q116
TUNER SECTION 5V
Q131
Q129
TUNER SECTION 9V
HIFI SECTION 9V
IC101
<3500Z>:CXP888P60Q-1-101Q
<3500ED>:CXP888P60Q-1-103
<2500Z>:CXP888P60Q-1-105
<2500ED>:CXP888P60Q-1-104
SYSTEM/SERVO CONTROL
CLOCK GENERATOR
XTAL 42
EXTAL 43
TEXTAL 86
TXTAL 87
X101 16MHz
X102 32.768KHz
RESET
RESET 40
IC104 PST600JMT
BACK UP CIRCUIT
EVER 5V
WAKE UP 50
Q113
JOG VD 88
HSW-V 94
C ROT 93
H SEL 92
REC-V 91
C SYNC 82
V-LEVEL 59
SYNCDET 55
JOG 36
CGCS 26
CGSCK 25
CGDATA 24
DENV 22
VPB 8
SSB SCK 5
SSB DATA 4
SP/LP 1
DAV 56
AFTCURVE 60
AGCLEVEL 49
T MUTE 35
AFTDEF 34
L-BAND 33
H-BAND 32
U-BAND 31
TU PWM 28
CADATA 100
CASCK 99
HSW-A 95
DECORD 7
REC MUTE 3
IIC SCK 30
IIC DATA 9
REC-A 96
A-LEVEL 58
PDC DECORDER
IC106 SDA5649
DAV SDA SCL CBVS
6 3 2 13
HPF
Q118
IC105 E²P-ROM
5 6
VIDEO SECTION
IC301 HA118201CF Y/C PROCESOR
IC303 LC74763M-9156 OSD
TUNER SECTION
NICAM ZWEITON (CN801) (CN802)
3 TU R
5 TU L
8 TU A
10 IIC SDA
11 IIC SCK
TU801 TMUG4
TMUG4-104ABG
CANAL SECTION
CN105
1 V OUT
3 V IN
7 V FRONT
15 SP/LP
9 CA DATA
10 CA SCK
11 REC MUTE
16 DECORD
17 HSW-A
13 IIC SDA
14 IIC SCK
5 TU-V
HIFI SECTION CN104
18 RF A
12 TU L
14 TU R
16 TU A
19 REC-A
20 A-LEVEL
IC701 TDA9614H
2 A HEAD PB
3 A HEAD REC
4 A-E HEAD GND
5 A-E HEAD
: PB VIDEO SIGNAL
: PB Y SIGNAL
: PB C SIGNAL
: REC VIDEO SIGNAL
: REC Y SIGNAL
: REC C SIGNAL
: CONTROL SIGNAL

BLOCK DIAGRAM – 3 (AUDIO SECTION)

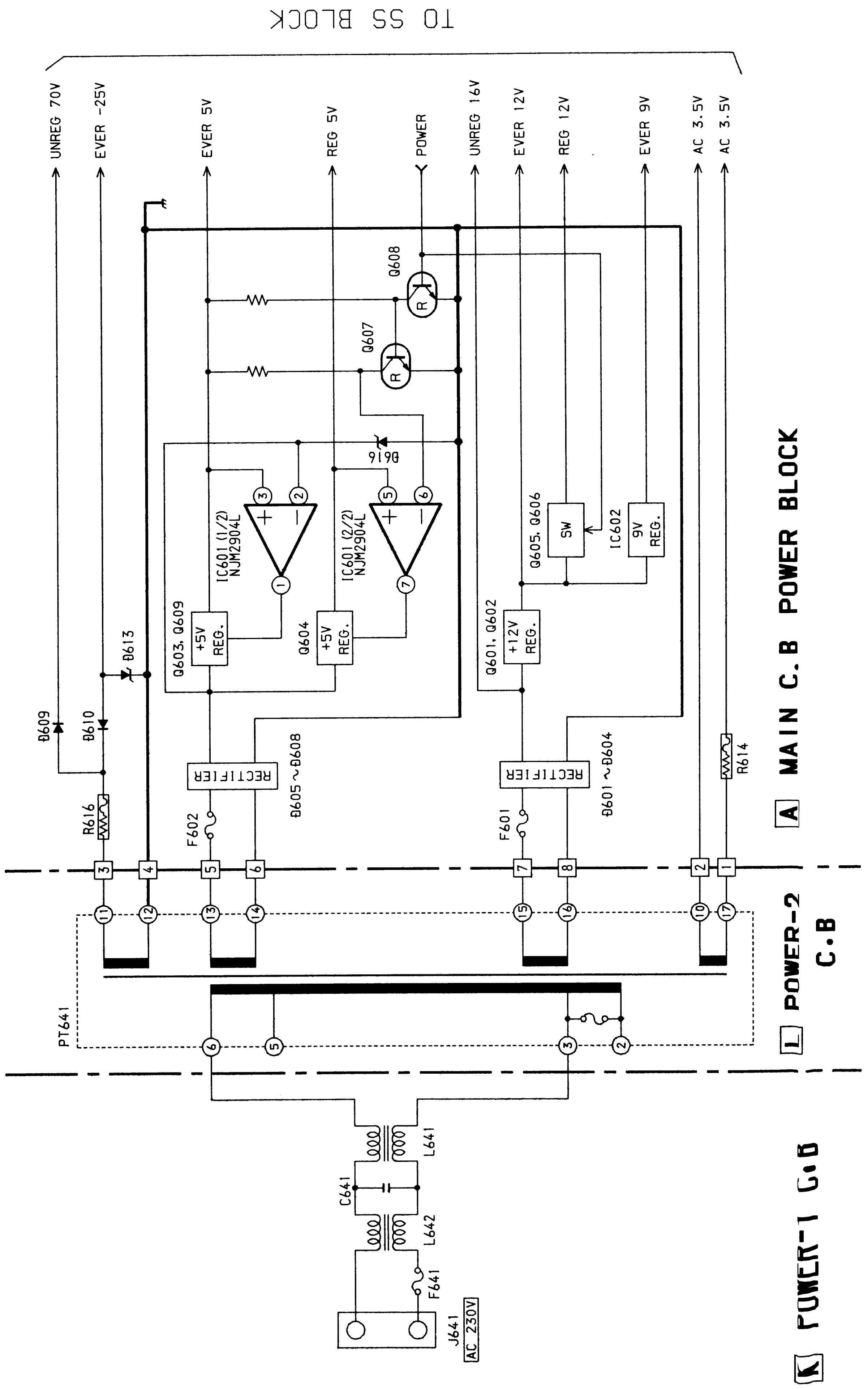

G HIFI/CANAL-1 C.B〈HV-FX3500Z,ED〉
H HIFI/CANAL-2 C.B〈HV-FX2500Z,EH〉
FROM CANAL BLOCK
IIC SCK
IIC SDA
HSW-A
HA BLOCK
E HEAD AMP C.B
IC551
IC LA7256 HIFI PRE/REC AMP
REG 5V
VCC
REC CURRENT AMP
AGC DET
AGC AMP
BUFF
EP
SP
REC MUTE
REC/PB
H.SW
NC
CN502
A COMMON 3
A LCH 2
A RCH 4
TO DRUM ASSY
TO VIDEO BLOCK
SP/LP
TO CANAL BLOCK
REC A
IC701
IC TDA9614H
HIFI AUDIO PROCESSOR
SUPPLY & VREF
LREF
MUTE
DOC
SDA
SCL
I²C
HF AGC
BPF
LEVEL DETECT
HF LIMITER
PLL
S & H
1.3MHz
1.4MHz
CCO
AUDIO CLIPPER
RAF
HF LPF
CCO
1.7MHz
1.8MHz
NOISE REDUCTION
AUDIO LPF
RAF+IPAF
AFO MUTE
OUT SEL
NOMUTE
VOLUME L
VOLUME R
RN + IPN
PB EQ
RN
PBSET
LP
RN+IPN
AGCN
NORMAL SEL
INPUT SELA
IC703
IC BA7755A
REC/PB SW
L707
BIAS
Q702
SW
CN701
A-LEVEL 20
A HEAD REC 3
A-E HEAD 5
A HEAD PB 2
N.C 16
TU L 12
TU R 14
TO CANAL BLOCK
HV-FX3500 ONLY
REG 12V
IC702
IC NJM2233BM
AUDIO SW
RF A
RF A
PB AU
FROM CANAL BLOCK
DC SEL
HP SEL
VOLUME HP
DEC SEL
LINE SEL
RFCMUTE
CN701
18 RF A
TO CANAL BLOCK
◀ :AUDIO PB
◁ :AUDIO REC
AU-DEC-OUT L
AU-DEC-OUT R
AU-21-OUT L
AU-21-OUT R
TO CANAL BLOCK
AU-IN R
AU-IN L
HV-FX3500 ONLY
AU-DEC-IN R
AU-DEC-IN L
AU-21-IN R
AU-21-IN L
AU-JACK-IN R
AU-JACK-IN L
FROM CANAL BLOCK

BLOCK DIAGRAM – 4 (TUNER SECTION)



A MAIN C.B
CN801 TO NICAM BLOCK CN451
SIF
TU GND
N.C
TU GND
N.C
TU MUTE
TU 5V
TU A
REG GND
IC SDA
IC SCK
CN802 TO ZWEITON BLOCK CN451
SIF
TU GND
TU R
TU GND
TU L
TU 9V
TU 5V
TU A
REG GND
IC SDA
IC SCK
TU GND
TO SS BLOCK
H BAND
AFT DEF
U BAND
AFT CURV
AGC LEVEL
L BAND
IC SDA
IC SCK
TU PWM
TU 5V
REG 5V
TU 9V
EVER 5V
UNREG 70V
REG GND
AUDIO PB
VIDEO PB
TO SS BLOCK CN104
REG 5V
TU 9V
EVER 5V
REG GND
Q811 VIDEO OUTPUT BUFFER
TO SS BLOCK CN105
Q807 AFT OUTPUT LEVEL MATCHING
Q808 ACTIVE LOW SW
Q804 AFT OUTPUT BUFFER
TU 9V
TU A (TO SS BLOCK)
Q806 VHF HIGH BAND SW
Q805 UHF BAND SW
DECOUPLE CAP
Q803 AGC OUTPUT LEVEL MATCHING
Q802 VHF LOW BAND SW
Q813 ACTIVE LOW SW
R852
REGULATOR 32V
Q801 PWM INTEGRATE TO DC
LPF FILTER
REG 5V
RF A (FROM SS BLOCK CN701)
RF V (FROM VIDEO BLOCK)
SW801 RF TEST SIGNAL SW
EVER 5V
DECOUPLE CAP
VIDEO OUT
SIF
AFT OUT
AUDIO OUT
HB
UB
AFT
+B
AGC
LB
TU
MB
RF A
RF V
TPSG SW
BB
TU801 TMUG4-104ABG

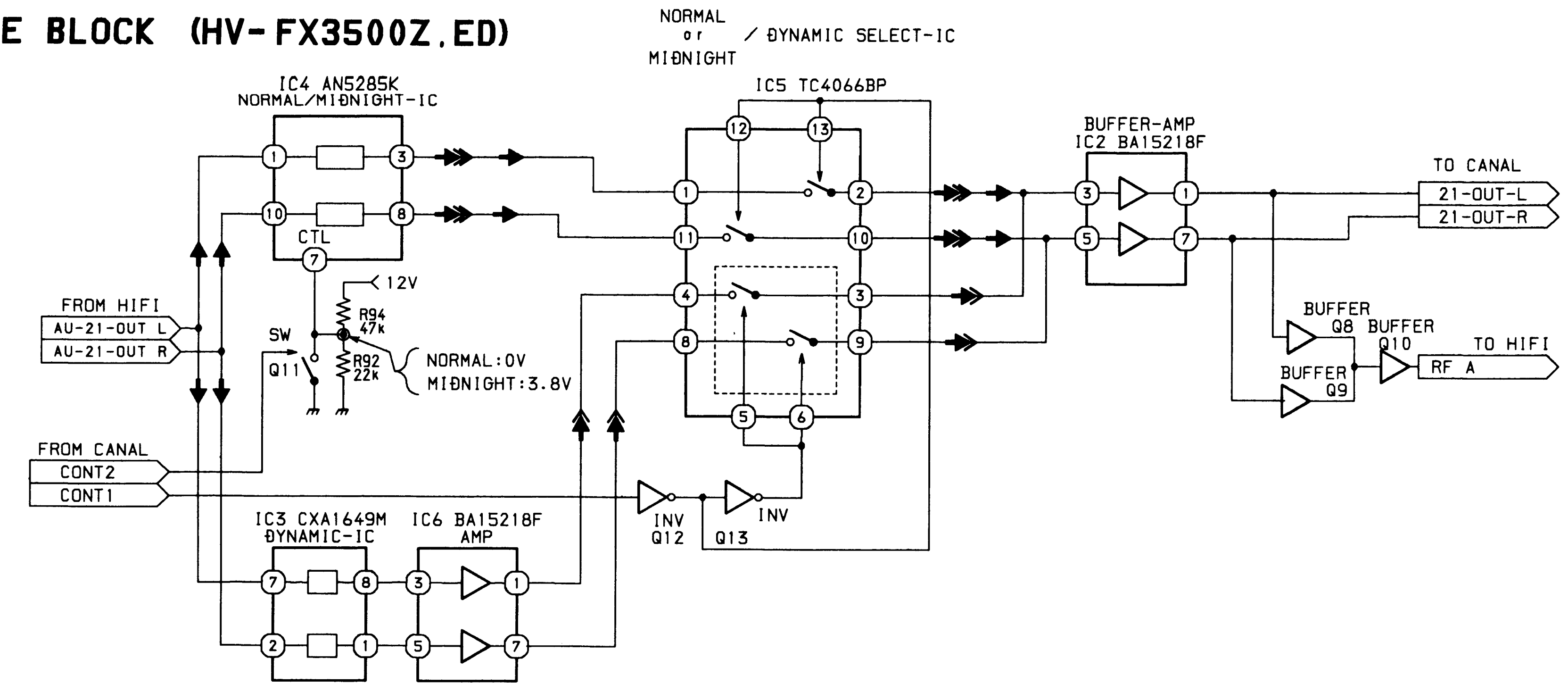
BLOCK DIAGRAM – 5 (POWER SECTION)



TO SS BLOCK
UNREG 70V
EVER -25V
EVER 5V
REG 5V
POWER
UNREG 16V
EVER 12V
REG 12V
EVER 9V
AC 3.5V
AC 3.5V
Q608
Q607
D616
IC601 (1/2) NJM2904L
IC601 (2/2) NJM2904L
Q603, Q609 +5V REG.
Q604 +5V REG.
Q601, Q602 +12V REG.
Q605, Q606 SW
IC602 9V REG.
D609
D610
D613
R616
F602
RECTIFIER
D605~D608
F601
RECTIFIER
D601~D604
R614
A MAIN C.B POWER BLOCK
L POWER-2 C.B
PT641
K POWER-1 C.B
L641
C641
L642
F641
J641
AC 230V

BLOCK DIAGRAM – 6 (THEATER SECTION)

G HIFI/CANAL-1 C.B
THEATRE BLOCK (HV-FX3500Z.ED)


NORMAL or MIDNIGHT / DYNAMIC SELECT-IC
IC5 TC4066BP
IC4 AN5285K
NORMAL/MIDNIGHT-IC
CTL
BUFFER-AMP
IC2 BA15218F
TO CANAL
21-OUT-L
21-OUT-R
FROM HIFI
AU-21-OUT L
AU-21-OUT R
12V
R94 47k
R92 22k
SW
Q11
NORMAL:0V
MIDNIGHT:3.8V
BUFFER
Q8
BUFFER
Q10
TO HIFI
RF A
BUFFER
Q9
FROM CANAL
CONT2
CONT1
INV
Q12
INV
Q13
IC3 CXA1649M
DYNAMIC-IC
IC6 BA15218F
AMP

	NORMAL	DYNAMIC MODE	MIDNIGHT MODE
CONT1	L	H	L
CONT2	H	L	L

(H:more than 3.5V
L:less than 0.5V)

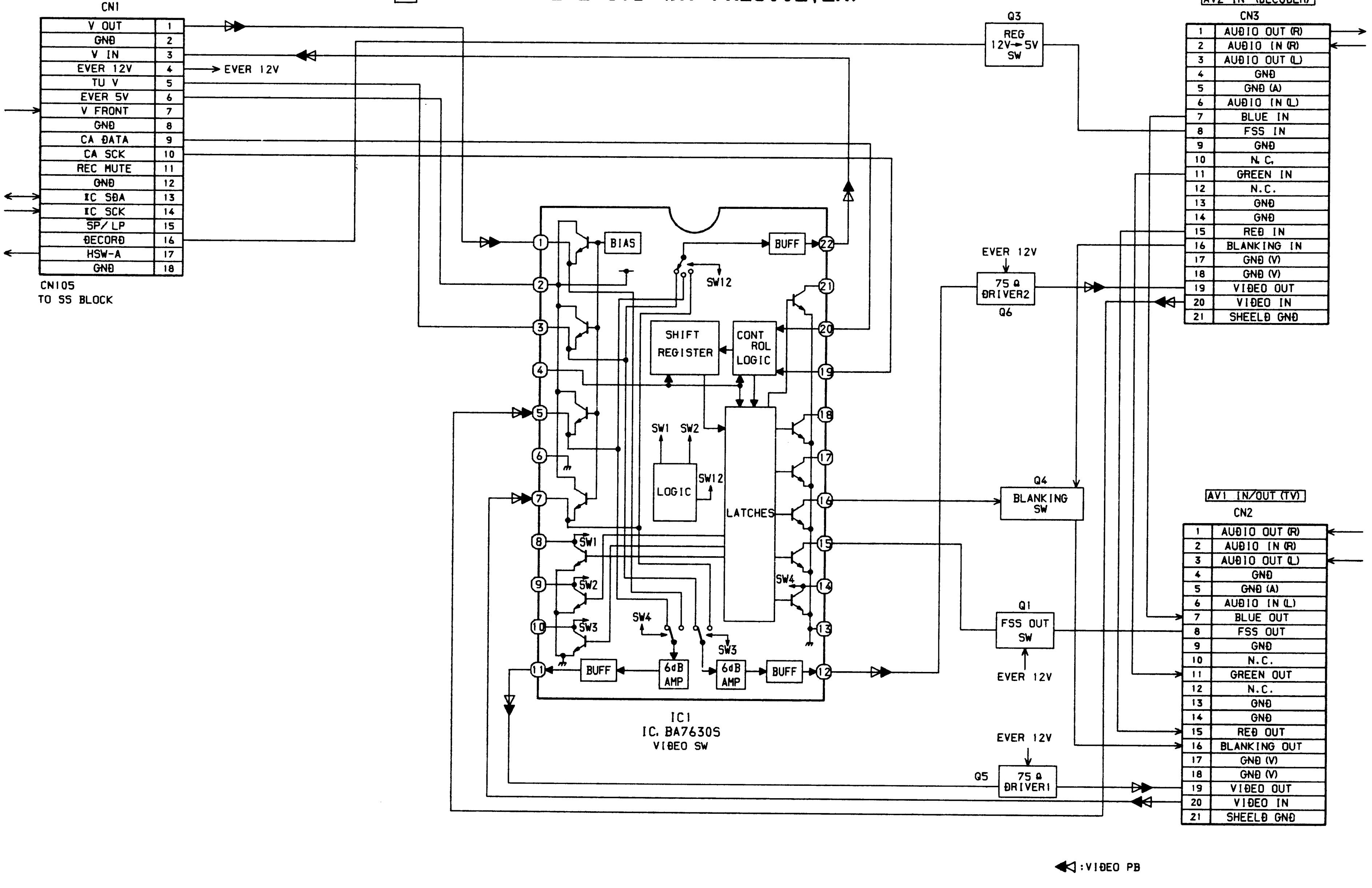
※ ATTENTION

- DYNAMIC MODE and MIDNIGHT MODE:PLAY BACK only. (HV-FX3500A, ED)
- NORMAL-sound: ➡ .
- DYNAMIC-sound: ⏩ .
- MIDNIGHT-sound: ⏩ .

- AU-21-OUT L:from IC701 ㉑ PIN in HIFI block.
- AU-21-OUT R:from IC701 ㉒ PIN in HIFI block.
- CONT1 :from IC1 ⑱ PIN in CANAL block.
- CONT2 :from IC1 ㉑ PIN in CANAL block.
- 21-OUT-L :to CN2③PIN and J1⑦PIN in CANAL block.
- 21-OUT-R :to CN2①PIN and J1⑦PIN in CANAL block.
- RF A :to IC702①PIN in HIFI block.
- ─○╲●─ :HIGH=ON, LOW=OFF.

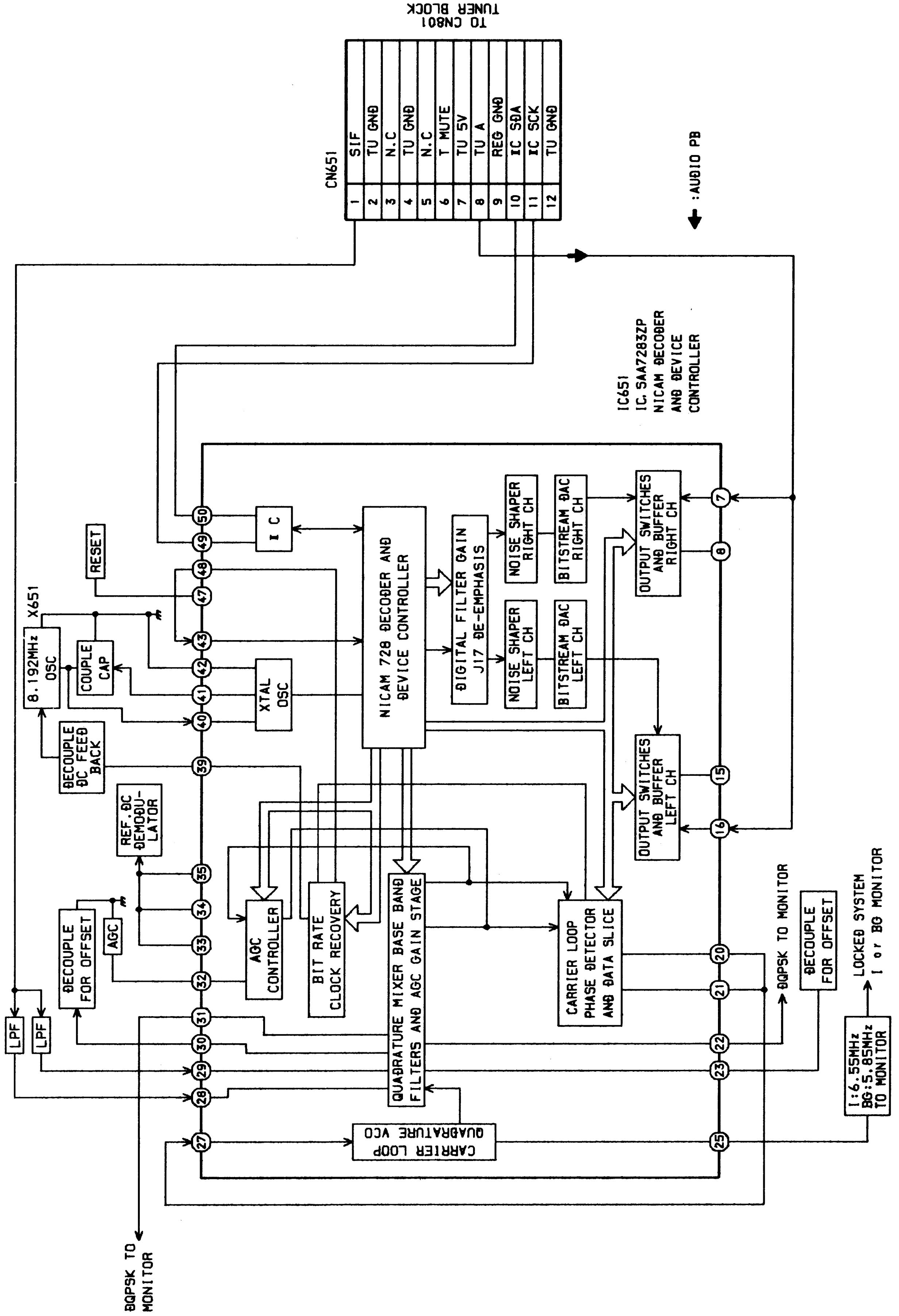
BLOCK DIAGRAM – 7 (CANAL SECTION)

G HIFI/CANAL-1 C.B <HV-FX3500Z.ED>
H HIFI/CANAL-2 C.B <HV-FX2500Z.EH>

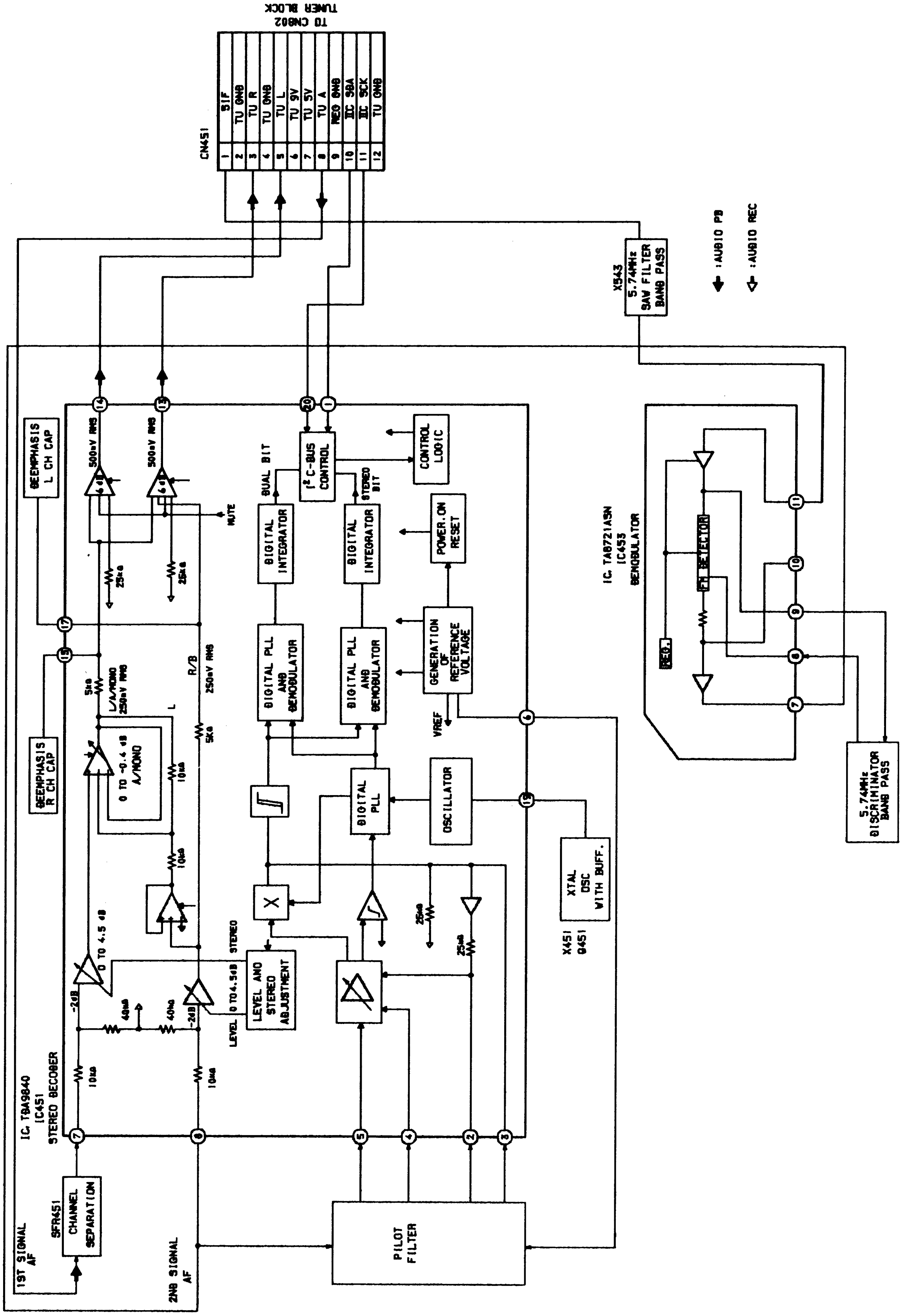

CN1
1 V OUT
2 GND
3 V IN
4 EVER 12V
5 TU V
6 EVER 5V
7 V FRONT
8 GND
9 CA DATA
10 CA SCK
11 REC MUTE
12 GND
13 IC SDA
14 IC SCK
15 SP/LP
16 DECORD
17 HSW-A
18 GND
CN105
TO SS BLOCK
EVER 12V
BIAS
BUFF
SW12
SHIFT REGISTER
CONT ROL LOGIC
SW1 SW2
LOGIC
SW12
LATCHES
SW1
SW2
SW3
SW4
SW4
SW3
BUFF
6dB AMP
6dB AMP
BUFF
IC1
IC, BA7630S
VIDEO SW
Q3
REG 12V→5V SW
EVER 12V
75 Ω DRIVER2
Q6
Q4
BLANKING SW
Q1
FSS OUT SW
EVER 12V
EVER 12V
Q5
75 Ω DRIVER1
AV2 IN (DECODER)
CN3
1 AUDIO OUT (R)
2 AUDIO IN (R)
3 AUDIO OUT (L)
4 GND
5 GND (A)
6 AUDIO IN (L)
7 BLUE IN
8 FSS IN
9 GND
10 N.C.
11 GREEN IN
12 N.C.
13 GND
14 GND
15 RED IN
16 BLANKING IN
17 GND (V)
18 GND (V)
19 VIDEO OUT
20 VIDEO IN
21 SHEELD GND
AV1 IN/OUT (TV)
CN2
1 AUDIO OUT (R)
2 AUDIO IN (R)
3 AUDIO OUT (L)
4 GND
5 GND (A)
6 AUDIO IN (L)
7 BLUE OUT
8 FSS OUT
9 GND
10 N.C.
11 GREEN OUT
12 N.C.
13 GND
14 GND
15 RED OUT
16 BLANKING OUT
17 GND (V)
18 GND (V)
19 VIDEO OUT
20 VIDEO IN
21 SHEELD GND

◀ :VIDEO PB

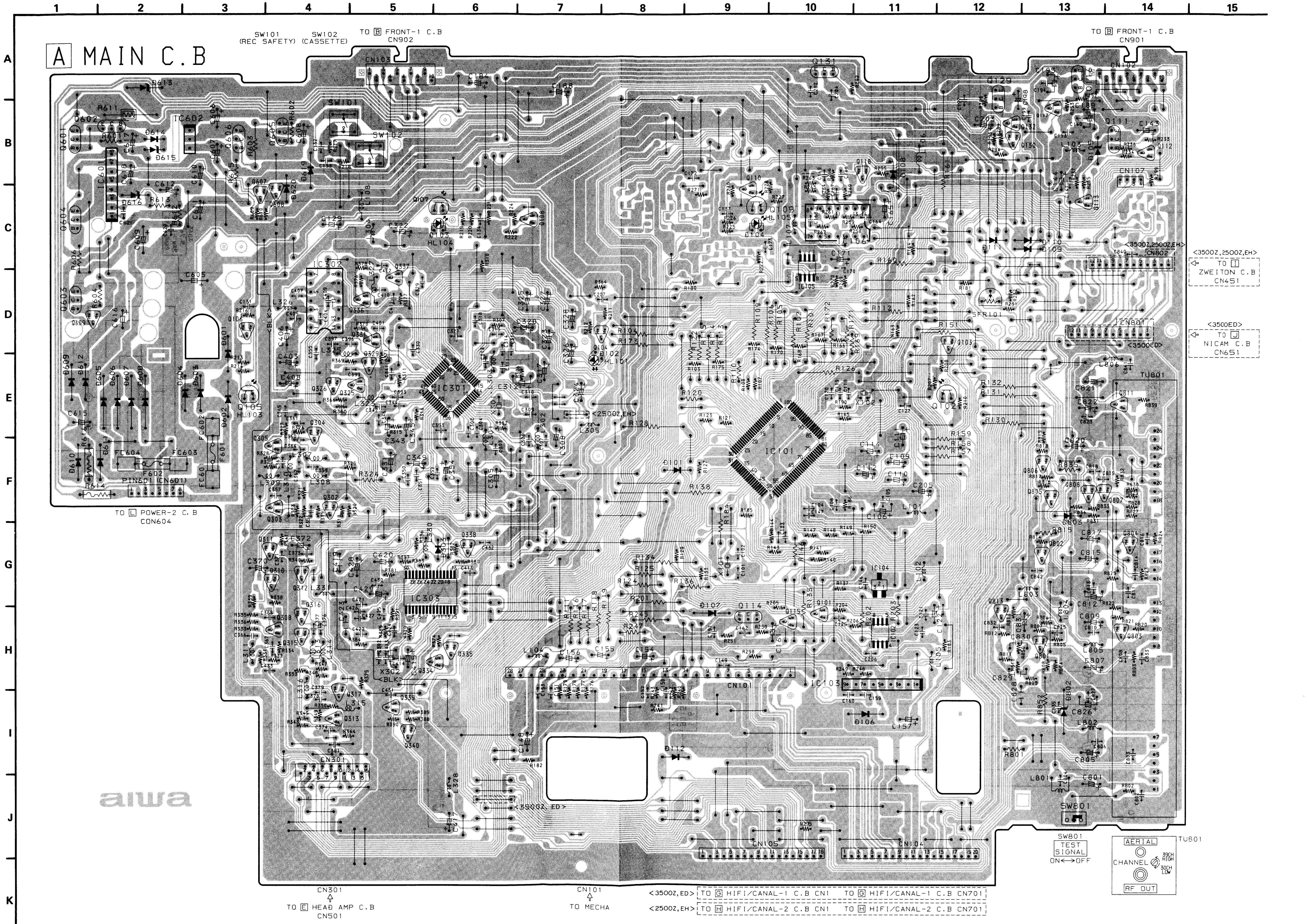
J NICAM C.B 〈HV-FX3500ED〉


TO CN801
TUNER BLOCK
CN651
1 SIF
2 TU GND
3 N.C
4 TU GND
5 N.C
6 T MUTE
7 TU 5V
8 TU A
9 REG GND
10 IIC SDA
11 IIC SCK
12 TU GND
◆ :AUDIO PB
IC651
IC. SAA7283ZP
NICAM DECODER
AND DEVICE
CONTROLLER
RESET
X651
8.192MHz
OSC
COUPLE CAP
DECOUPLE
DC FEED
BACK
REF. DC
DEMODU-
LATOR
DECOUPLE
FOR OFFSET
AGC
LPF
LPF
XTAL OSC
I²C
AGC
CONTROLLER
BIT RATE
CLOCK RECOVERY
NICAM 728 DECODER AND
DEVICE CONTROLLER
QUADRATURE MIXER BASE BAND
FILTERS AND AGC GAIN STAGE
DIGITAL FILTER GAIN
J17 DE-EMPHASIS
NOISE SHAPER
RIGHT CH
NOISE SHAPER
LEFT CH
BITSTREAM DAC
RIGHT CH
BITSTREAM DAC
LEFT CH
OUTPUT SWITCHES
AND BUFFER
RIGHT CH
OUTPUT SWITCHES
AND BUFFER
LEFT CH
CARRIER LOOP
PHASE DETECTOR
AND DATA SLICE
CARRIER LOOP
QUADRATURE VCO
50
49
48
47
43
42
41
40
39
35
34
33
32
31
30
29
28
27
7
8
15
16
20
21
22
23
25
DQPSK TO MONITOR
DECOUPLE
FOR OFFSET
LOCKED SYSTEM
I or BG MONITOR
I:6.55MHz
BG:5.85MHz
TO MONITOR
DQPSK TO
MONITOR

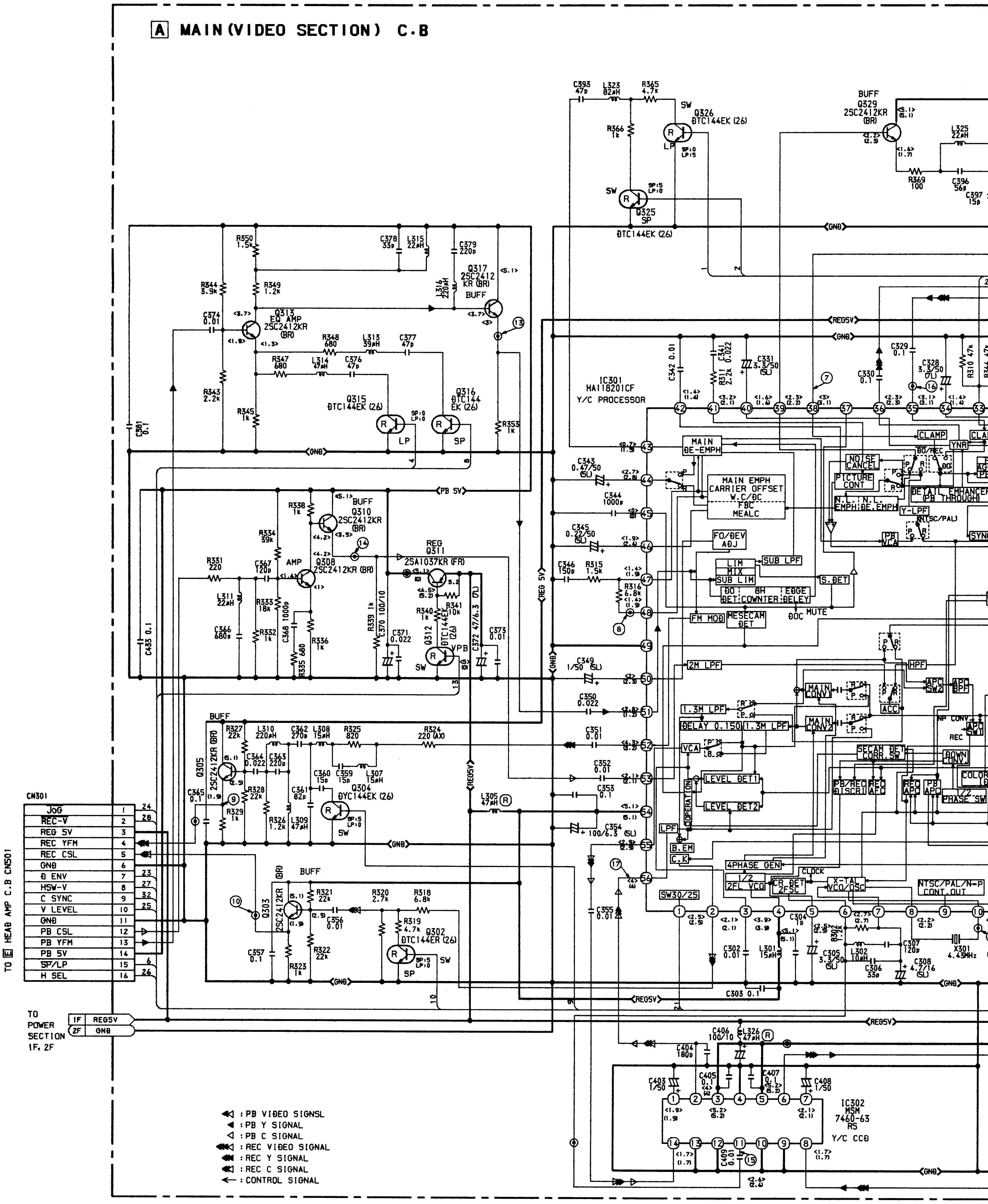
I ZWEITON C.B
ZWEITON BLOCK 〈HV-FX3500Z/FX2500Z,EH〉

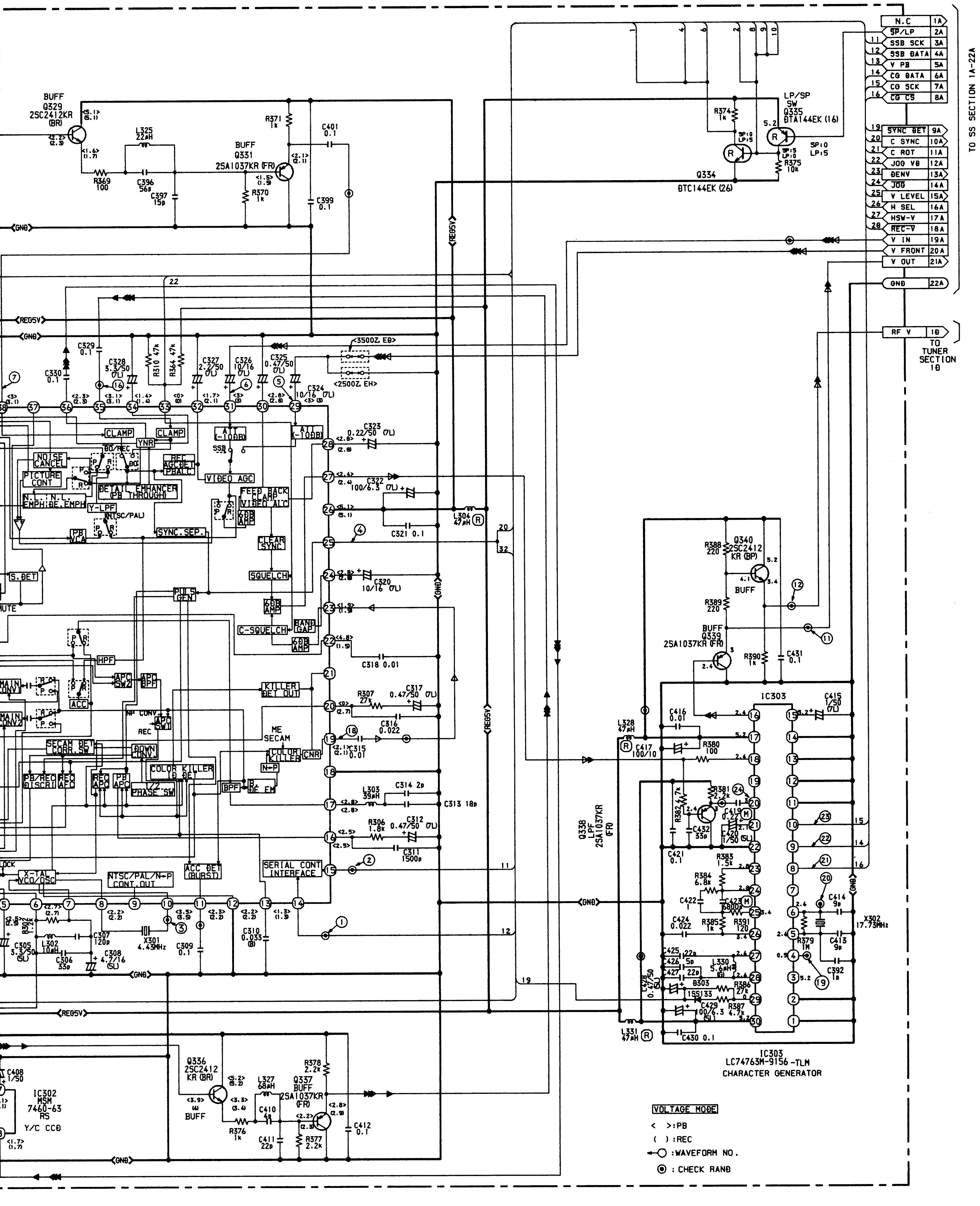

TO CN802
TUNER BLOCK
CN451
1 SIF
2 TU GND
3 TU R
4 TU GND
5 TU L
6 TU 9V
7 TU 5V
8 TU A
9 REG GND
10 IIC SDA
11 IIC SCK
12 TU GND
◆ :AUDIO PB
◇ :AUDIO REC
X543
5.74MHz
SAW FILTER
BAND PASS
DEEMPHASIS
L CH CAP
DEEMPHASIS
R CH CAP
500mV RMS
500mV RMS
6dB
6dB
MUTE
25kΩ
25kΩ
5kΩ
L/A/MONO
250mV RMS
L
R/B
250mV RMS
5kΩ
0 TO -0.4 dB
A/MONO
10kΩ
10kΩ
0 TO 4.5 dB
-2dB
-2dB
40kΩ
40kΩ
10kΩ
10kΩ
STEREO
LEVEL
0 TO 4.5dB
LEVEL AND
STEREO
ADJUSTMENT
DUAL BIT
STEREO
BIT
I²C-BUS
CONTROL
CONTROL
LOGIC
DIGITAL
INTEGRATOR
DIGITAL
INTEGRATOR
POWER.ON
RESET
DIGITAL PLL
AND
DEMODULATOR
DIGITAL PLL
AND
DEMODULATOR
GENERATION
OF
REFERENCE
VOLTAGE
VREF
DIGITAL
PLL
OSCILLATOR
X
25kΩ
25kΩ
XTAL
OSC
WITH BUFF.
X451
Q451
IC. TDA9840
IC451
STEREO DECODER
1ST SIGNAL
AF
SFR451
CHANNEL
SEPARATION
2ND SIGNAL
AF
PILOT
FILTER
14
13
20
1
17
15
6
19
7
8
5
4
2
3
IC. TA8721ASN
IC453
DEMODULATOR
FM DETECTOR
REG.
11
10
9
8
7
5.74MHz
DISCRIMINATOR
BAND PASS

WIRING – 1 (MAIN SECTION)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K
A MAIN C.B
SW101 (REC SAFETY)
SW102 (CASSETTE)
TO B FRONT-1 C.B CN902
TO B FRONT-1 C.B CN901
CN103
CN102
CN107
<3500Z,2500Z,EH>
TO I ZWEITON C.B CN451
<3500ED>
TO J NICAM C.B CN651
CN802
CN801
TU801
IC101
IC102
IC103
IC104
IC105
IC301
IC302
IC303
IC601
IC602
<2500Z,EH>
<3500Z,ED>
<BLK>
TO L POWER-2 C.B CON604
PIN601 (CN601)
CN101
CN104
CN105
CN301
aiwa
SW801
TEST SIGNAL
ON ←→ OFF
TU601
AERIAL
CHANNEL
39CH HIGH
30CH LOW
RF OUT
CN301
TO E HEAD AMP C.B CN501
CN101
TO MECHA
<3500Z,ED> TO G HIFI/CANAL-1 C.B CN1 TO G HIFI/CANAL-1 C.B CN701
<2500Z,EH> TO H HIFI/CANAL-2 C.B CN1 TO H HIFI/CANAL-2 C.B CN701

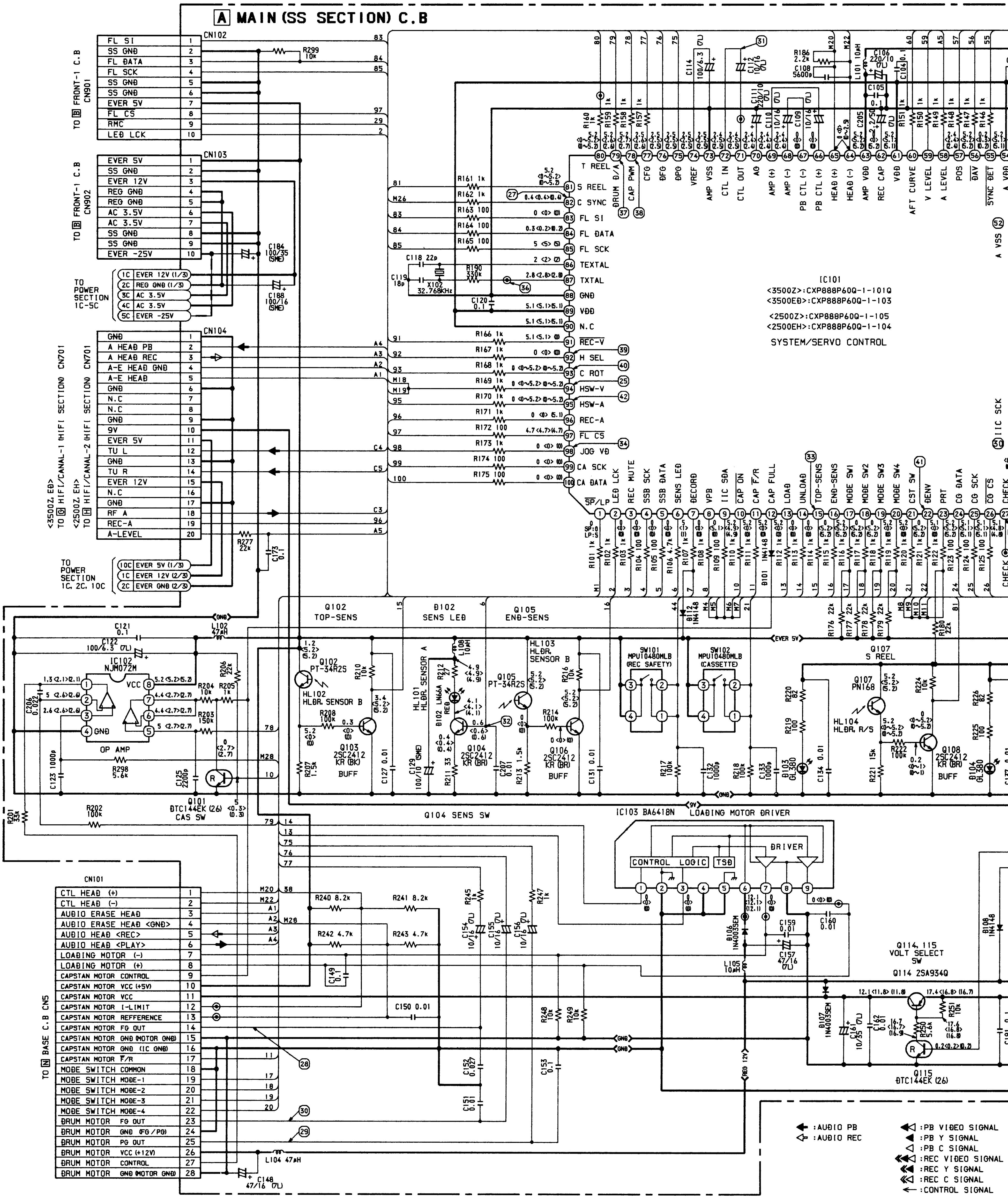
SCHEMATIC DIAGRAM – 1 (VIDEO SECTION)

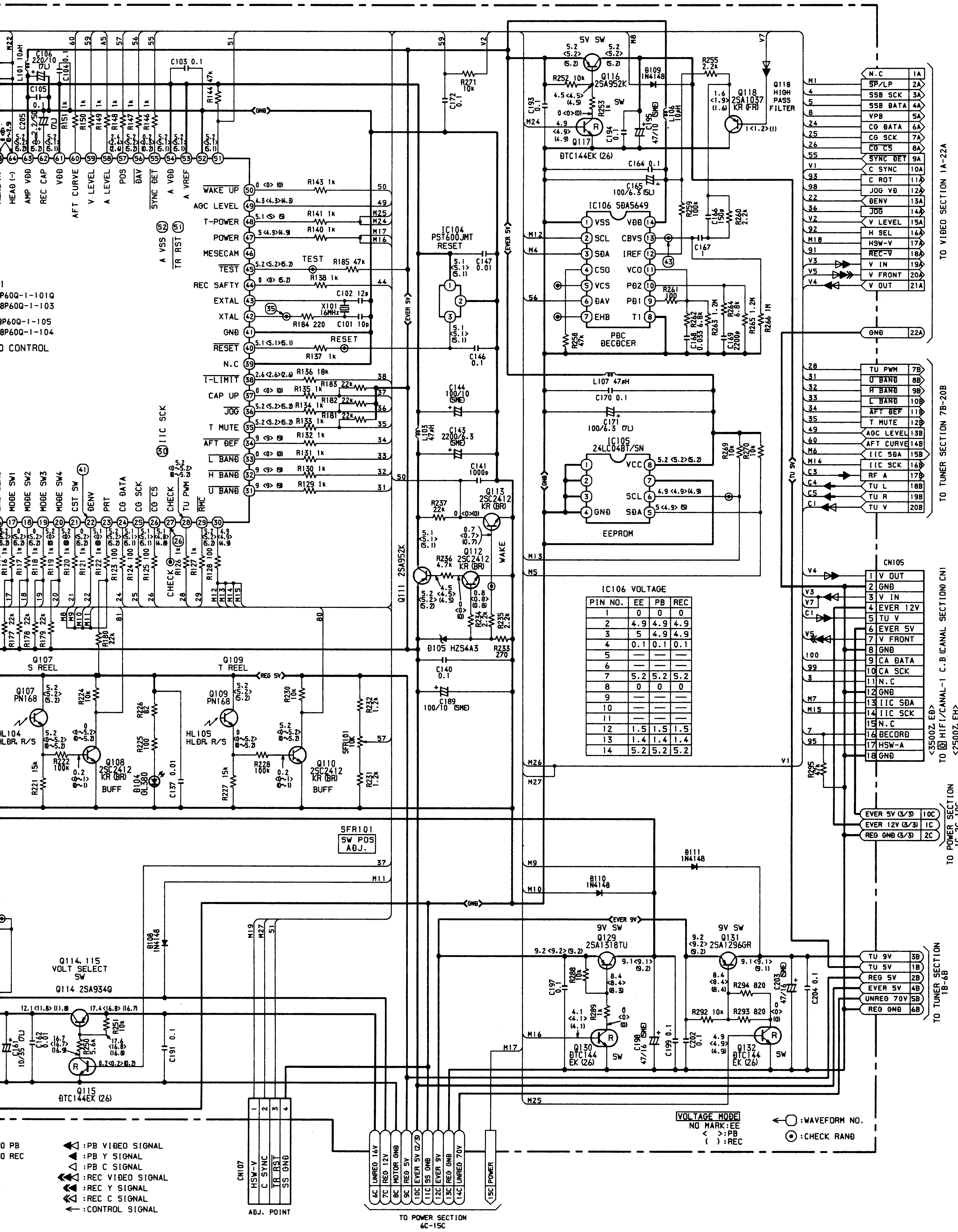

A MAIN (VIDEO SECTION) C.B
IC301 HA118201CF Y/C PROCESSOR
IC302 MSM 7460-63 RS Y/C CCD
Q313 EQ AMP 2SC2412KR (BR)
Q317 2SC2412 KR (BR) BUFF
Q315 DTC144EK (26)
Q316 DTC144 EK (26)
Q310 BUFF 2SC2412KR (BR)
Q308 AMP 2SC2412KR (BR)
Q311 REG 2SA1037KR (FR)
Q312 DTC144EK (26)
Q305 BUFF 2SC2412KR (BR)
Q304 DTC144EK (26)
Q303 BUFF 2SC2412KR (BR)
Q302 DTC144ER (26)
Q326 SW DTC144EK (26)
Q325 SW DTC144EK (26)
Q329 BUFF 2SC2412KR (BR)
X301 4.43MHz
MAIN DE-EMPH
MAIN EMPH CARRIER OFFSET W.C/DC FBC MEALC
FO/DEV ADJ
LIM MIX SUB LIM
SUB LPF
DO DET
8H COWNTER
EDGE DELEY
S.DET
FM MOD
MESECAM DET
DOC
MUTE
2M LPF
1.3M LPF
DELAY 0.15U
MAIN CONV1
MAIN CONV2
VCA
LEVEL DET1
LEVEL DET2
OPERATION
LPF
B.EM
C.K
4PHASE GEN
1/2 2FL VCO
CR DET 2FSC
X-TAL VCO/OSC
CLOCK
NTSC/PAL/N-P CONT.OUT
SW30/25
CLAMP
YNR
NOISE CANCEL
PICTURE CONT
DETAIL ENHANCER (PB THROUGH)
N.L. EMPH
N.L. DE.EMPH
Y-LPF
NTSC/PAL
PB VCA
SYNC
HPF
APC SW2
BPF
ACC
SECAM DET CORR.SW
PB/REC DISCRI
AFC
REC APC
PB APC
1/2 PHASE SW
COLOR
REC
REG5V
PB 5V
REG 5V
GND
CN301
JOG
REC-V
REG 5V
REC YFM
REC CSL
GND
D ENV
HSW-V
C SYNC
V LEVEL
GND
PB CSL
PB YFM
PB 5V
SP/LP
H SEL
TO E HEAD AMP C.B CN501
TO POWER SECTION 1F, 2F
1F REG5V
2F GND
: PB VIDEO SIGNSL
: PB Y SIGNAL
: PB C SIGNAL
: REC VIDEO SIGNAL
: REC Y SIGNAL
: REC C SIGNAL
: CONTROL SIGNAL



N.C 1A
SP/LP 2A
SSB SCK 3A
SSB DATA 4A
V PB 5A
CG DATA 6A
CG SCK 7A
CG CS 8A
SYNC DET 9A
C SYNC 10A
C ROT 11A
JOG VD 12A
DENV 13A
JOG 14A
V LEVEL 15A
H SEL 16A
HSW-V 17A
REC-V 18A
V IN 19A
V FRONT 20A
V OUT 21A
GND 22A
TO SS SECTION 1A-22A
RF V 1B
TO TUNER SECTION 1B
BUFF Q329 2SC2412KR (BR)
L325 22μH
R369 100
C396 56p
C397 15p
BUFF Q331 2SA1037KR (FR)
R370 1k
R371 1k
C401 0.1
C399 0.1
LP/SP SW Q335 DTA144EK (16)
R374 1k
R375 10k
Q334 DTC144EK (26)
SP:0 LP:5
<REG5V>
<GND>
C329 0.1
C330 0.1
C328 3.3/50 (7L)
R310 47k
R364 47k
C327 2.2/50 (7L)
C326 10/16 (7L)
C325 0.47/50 (7L)
C324 10/16 (7L)
<3500Z ED>
<2500Z EH>
C323 0.22/50 (7L)
C322 100/6.3 (7L)
L304 47μH
C321 0.1
C320 10/16 (7L)
C318 0.01
C317 0.47/50 (7L)
R307 27k
C316 0.022
C315 0.01
L303 39μH
C314 2p
C313 18p
R306 1.8k
C312 0.47/50 (7L)
C311 1500p
CLAMP
YNR
NOISE CANCEL
PICTURE CONT
REC AGCDET PBALC
DETAIL ENHANCER (PB THROUGH)
N.L. EMPH
N.L. DE.EMPH
Y-LPF
NTSC/PAL
PB VCA
S.DET
ATT (-10DB)
VIDEO AGC
FEED BACK CLAMP VIDEO ALC
SYNC.SEP.
CLEAR SYNC
SQUELCH
6DB AMP
PULS GEN
C-SQUELCH
BAND GAP
HPF
APC SW2
APC BPF
ACC
MAIN CONV1
MAIN CONV2
NP CONV
APC SW1
REC
SECAM DET CORR.SW
DOWN CONV
KILLER DET OUT
ME SECAM
COLOR KILLER
CNR
N-P
COLOR KILLER P.DET
PB/REC DISCRI
REC AFC
REC APC
PB APC
1/2 PHASE SW
BPF
DE EM
SERIAL CONT INTERFACE
X-TAL VCO/OSC
NTSC/PAL/N-P CONT.OUT
ACC DET (BURST)
C305 3.3/50 (5L)
L302 10μH
C306 33p
C307 120p
C308 4.7/16 (5L)
X301 4.43MHz
C309 0.1
C310 0.033 (B)
C408 1/50
IC302 MSM 7460-63 RS Y/C CCD
Q336 2SC2412 KR (BR) BUFF
R376 1k
L327 68μH
C410 4p
C411 22p
Q337 BUFF 2SA1037KR (FR)
R378 2.2k
R377 2.2k
C412 0.1
R388 220
Q340 2SC2412 KR (BP)
BUFF
R389 220
BUFF Q339 2SA1037KR (FR)
R390 1k
C431 0.1
IC303
C416 0.01
C415 1/50 (7L)
L328 47μH
C417 100/10
R380 100
Q338 LPF 2SA1037KR (FR)
R382 4.7k
R381 2k
C419
C432 33p
C420 1/50 (5L)
C421 0.1
R383 1.5k
R384 6.8k
C422 1
C423
C424 0.022
R385 1k
R391 120
C414 9p
X302 17.73MHz
R379 1M
C413 9p
C392 1p
C425 22p
C426 5p
C427 22p
L330 5.6μH
D303 1SS133
R386 27k
C429 100/6.3 (5L)
R387 4.7k
C428 0.47/50 (5L)
L331 47μH
C430 0.1
IC303 LC74763M-9156-TLM CHARACTER GENERATOR
VOLTAGE MODE
< >:PB
( ):REC
—○ :WAVEFORM NO.
◉ : CHECK RAND

SCHEMATIC DIAGRAM – 2 (SYSTEM CONTROL／SERVO SECTION)

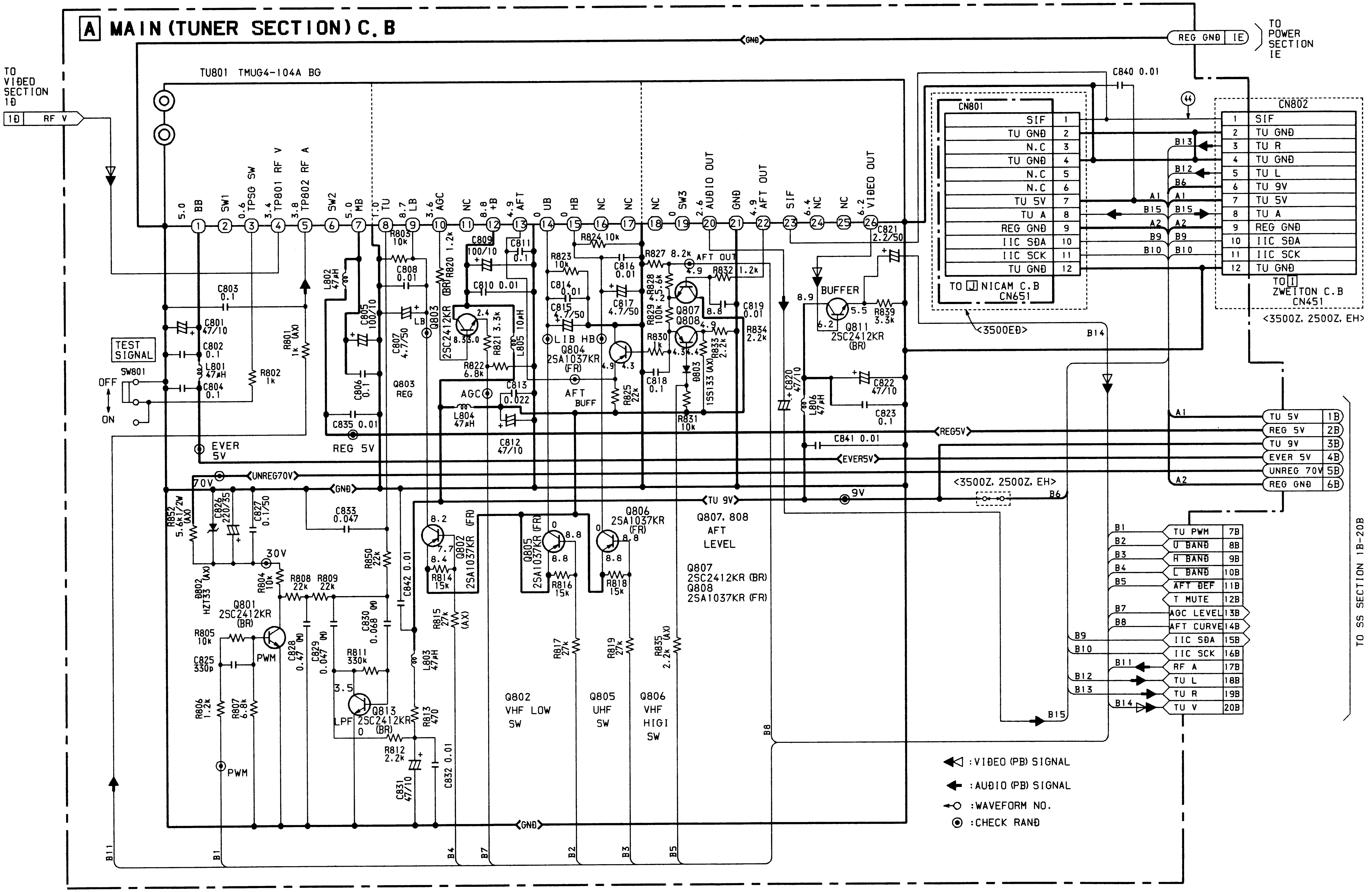

A MAIN (SS SECTION) C.B
CN102
TO B FRONT-1 C.B CN901
FL SI
SS GND
FL DATA
FL SCK
SS GND
SS GND
EVER 5V
FL CS
RMC
LED LCK
CN103
TO B FRONT-1 C.B CN902
EVER 5V
SS GND
EVER 12V
REG GND
REG GND
AC 3.5V
AC 3.5V
SS GND
SS GND
EVER -25V
TO POWER SECTION 1C-5C
CN104
<3500Z ED> TO G HIFI/CANAL-1 (HIFI SECTION) CN701
<2500Z EH> TO H HIFI/CANAL-2 (HIFI SECTION) CN701
A HEAD PB
A HEAD REC
A-E HEAD GND
A-E HEAD
TU L
TU R
RF A
REC-A
A-LEVEL
TO POWER SECTION 1C, 2C, 10C
IC101
<3500Z>:CXP888P60Q-1-101Q
<3500ED>:CXP888P60Q-1-103
<2500Z>:CXP888P60Q-1-105
<2500EH>:CXP888P60Q-1-104
SYSTEM/SERVO CONTROL
T REEL
S REEL
C SYNC
FL SI
FL DATA
FL SCK
TEXTAL
TXTAL
GND
VDD
N.C
REC-V
H SEL
C ROT
HSW-V
HSW-A
REC-A
FL CS
JOG VD
CA SCK
CA DATA
SP/LP
X102 32.768KHz
IC102 NJM072M
OP AMP
Q101 DTC144EK (26) CAS SW
Q102 TOP-SENS
Q102 PT-34R2S
HL102 HLDR. SENSOR B
Q103 2SC2412 KR (BK) BUFF
D102 SENS LED
HL101 HLDR. SENSOR A
Q105 END-SENS
Q105 PT-34R2S
HL103 HLDR. SENSOR B
Q104 2SC2412 KR (BR)
Q106 2SC2412 KR (BR) BUFF
Q104 SENS SW
SW101 MPU10480MLB (REC SAFETY)
SW102 MPU10480MLB (CASSETTE)
Q107 S REEL
Q107 PN168
HL104 HLDR. R/S
Q108 2SC2412 KR (BR) BUFF
IC103 BA6418N LOADING MOTOR DRIVER
CONTROL LOGIC
TSD
DRIVER
Q114, 115 VOLT SELECT SW
Q114 2SA934Q
Q115 DTC144EK (26)
CN101
TO N BASE C.B CN5
CTL HEAD (+)
CTL HEAD (-)
AUDIO ERASE HEAD
AUDIO ERASE HEAD <GND>
AUDIO HEAD <REC>
AUDIO HEAD <PLAY>
LOADING MOTOR (-)
LOADING MOTOR (+)
CAPSTAN MOTOR CONTROL
CAPSTAN MOTOR VCC (+5V)
CAPSTAN MOTOR VCC
CAPSTAN MOTOR I-LIMIT
CAPSTAN MOTOR REFFERENCE
CAPSTAN MOTOR FG OUT
CAPSTAN MOTOR GND (MOTOR GND)
CAPSTAN MOTOR GND (IC GND)
CAPSTAN MOTOR F/R
MODE SWITCH COMMON
MODE SWITCH MODE-1
MODE SWITCH MODE-2
MODE SWITCH MODE-3
MODE SWITCH MODE-4
DRUM MOTOR FG OUT
DRUM MOTOR GND (FG/PG)
DRUM MOTOR PG OUT
DRUM MOTOR VCC (+12V)
DRUM MOTOR CONTROL
DRUM MOTOR GND (MOTOR GND)
:AUDIO PB
:AUDIO REC
:PB VIDEO SIGNAL
:PB Y SIGNAL
:PB C SIGNAL
:REC VIDEO SIGNAL
:REC Y SIGNAL
:REC C SIGNAL
:CONTROL SIGNAL


5V SW
Q116 2SA952K
Q117 DTC144EK (26)
Q118 2SA1037 KR (FR)
Q118 HIGH PASS FILTER
IC106 SDA5649
PBC DECODER
IC105 24LC04BT/SN
EEPROM
IC104 PST600JMT
RESET
Q111 2SA952K
Q112 2SC2412 KR (BR)
Q113 2SC2412 KR (BR)
WAKE
D105 HZS4A3
Q107 S REEL
Q107 PN168
HL104 HLDR. R/S
Q108 2SC2412 KR (BR)
BUFF
Q109 T REEL
Q109 PN168
HL105 HLDR. R/S
Q110 2SC2412 KR (BR)
BUFF
D104 GL380
SFR101 SW POS ADJ.
D111 1N4148
D110 1N4148
D108 1N4148
Q114, 115 VOLT SELECT SW
Q114 2SA934Q
Q115 DTC144EK (26)
9V SW
Q129 2SA1318TU
Q130 DTC144 EK (26)
9V SW
Q131 2SA1296GR
Q132 DTC144 EK (26)
SW
WAKE UP
AGC LEVEL
T-POWER
POWER
MESECAM
TEST
REC SAFTY
EXTAL
XTAL
GND
RESET
N.C
T-LIMIT
CAP UP
JOG
T MUTE
AFT DEF
L BAND
H BAND
U BAND
X101 16MHz
N.C
SP/LP
SSB SCK
SSB DATA
VPB
CG DATA
CG SCK
CG CS
SYNC DET
C SYNC
C ROT
JOG VD
DENV
JOG
V LEVEL
H SEL
HSW-V
REC-V
V IN
V FRONT
V OUT
GND
TO VIDEO SECTION 1A-22A
TU PWM
U BAND
H BAND
L BAND
AFT DEF
T MUTE
AGC LEVEL
AFT CURVE
IIC SDA
IIC SCK
RF A
TU L
TU R
TU V
TO TUNER SECTION 7B-20B
CN105
V OUT
GND
V IN
EVER 12V
TU V
EVER 5V
V FRONT
GND
CA DATA
CA SCK
N.C
GND
IIC SDA
IIC SCK
N.C
DECORD
HSW-A
GND
<3500Z ED> TO D HIFI/CANAL-1 C.B (CANAL SECTION) CN1
<2500Z EH> TO H HIFI/CANAL-2 C.B (CANAL SECTION) CN1
EVER 5V (3/3)
EVER 12V (3/3)
REG GND (3/3)
TO POWER SECTION 1C, 2C 10C
TU 9V
TU 5V
REG 5V
EVER 5V
UNREG 70V
REG GND
TO TUNER SECTION 1B-6B
CN107
HSW-V
C SYNC
TR RST
SS GND
ADJ. POINT
UNREG 16V
REG 12V
MOTOR GND
REG 5V
EVER 5V (2/3)
SS GND
EVER 9V
REG GND
UNREG 70V
POWER
TO POWER SECTION 6C-15C
0 PB
0 REC
:PB VIDEO SIGNAL
:PB Y SIGNAL
:PB C SIGNAL
:REC VIDEO SIGNAL
:REC Y SIGNAL
:REC C SIGNAL
:CONTROL SIGNAL
VOLTAGE MODE
NO MARK:EE
< >:PB
( ):REC
:WAVEFORM NO.
:CHECK RAND

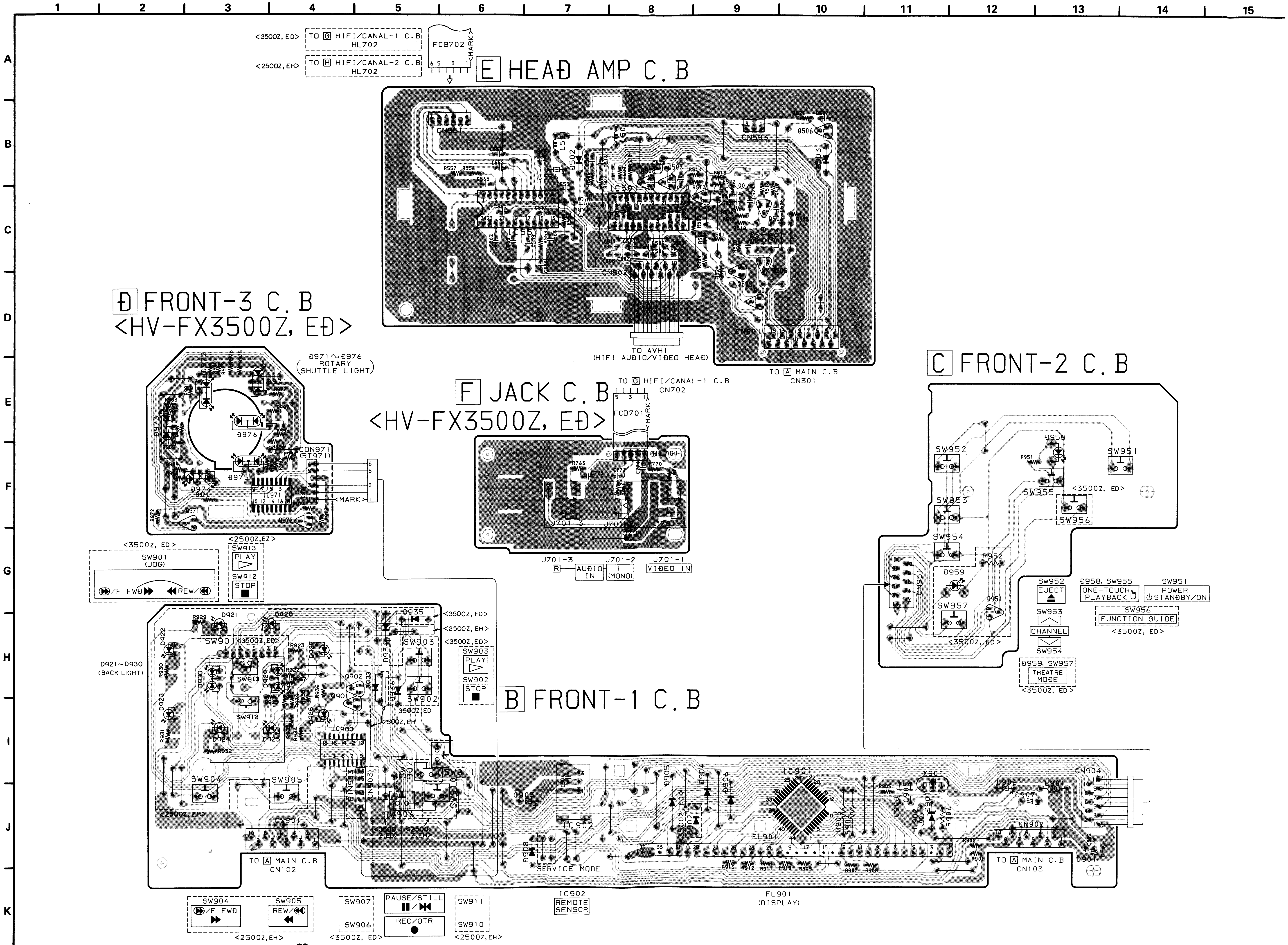
IC106 VOLTAGE

PIN NO.	EE	PB	REC
1	0	0	0
2	4.9	4.9	4.9
3	5	4.9	4.9
4	0.1	0.1	0.1
5	—	—	—
6	—	—	—
7	5.2	5.2	5.2
8	0	0	0
9	—	—	—
10	—	—	—
11	—	—	—
12	1.5	1.5	1.5
13	1.4	1.4	1.4
14	5.2	5.2	5.2

SCHEMATIC DIAGRAM – 3 (TUNER SECTION)

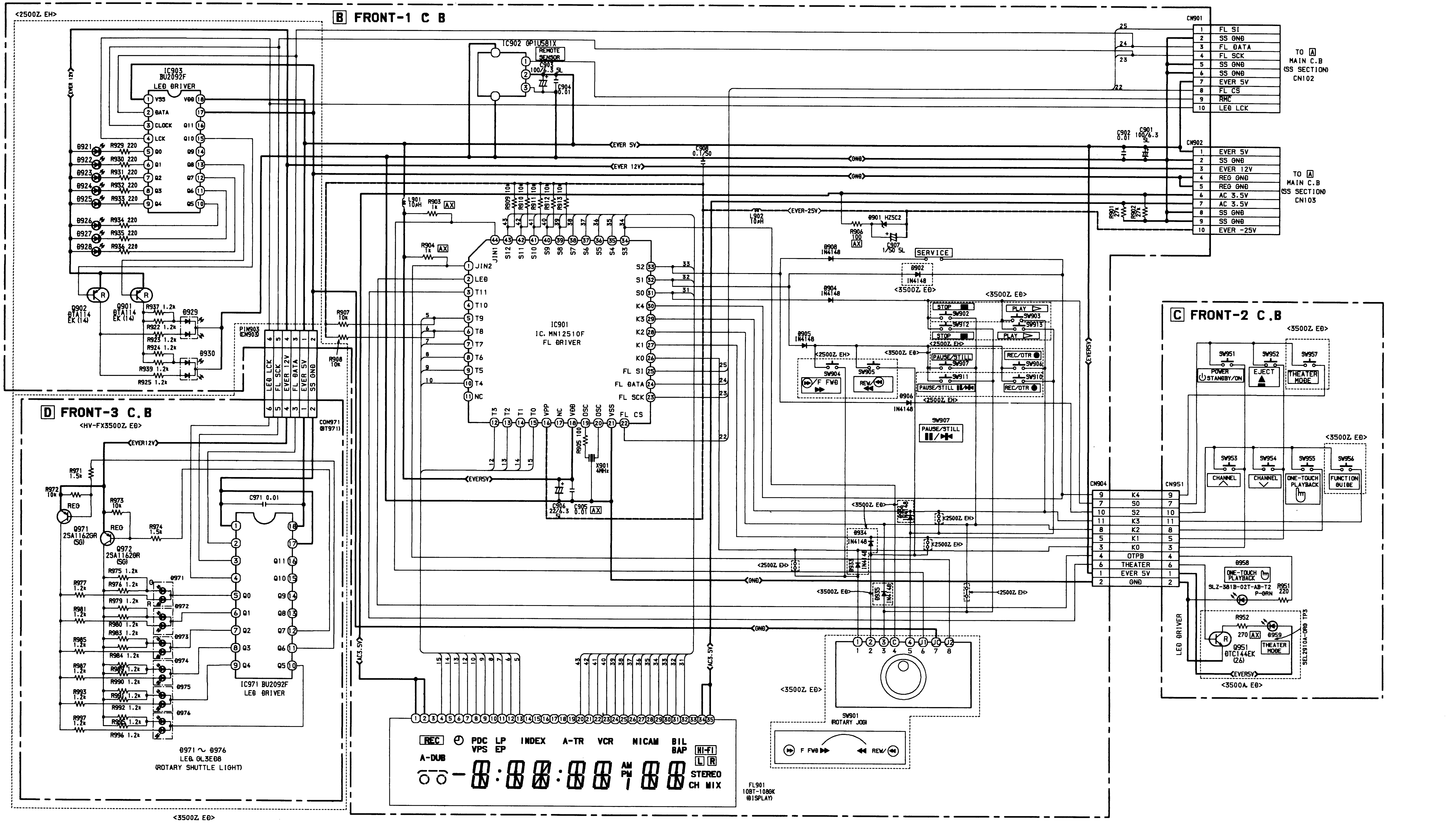

A MAIN (TUNER SECTION) C.B
TO VIDEO SECTION 1D
1D RF V
TU801 TMUG4-104A BG
REG GND 1E
TO POWER SECTION 1E
C840 0.01
CN801
SIF
TU GND
N.C
TU GND
N.C
N.C
TU 5V
TU A
REG GND
IIC SDA
IIC SCK
TU GND
TO J NICAM C.B CN651
<3500ED>
CN802
SIF
TU GND
TU R
TU GND
TU L
TU 9V
TU 5V
TU A
REG GND
IIC SDA
IIC SCK
TU GND
TO I ZWEITON C.B CN451
<3500Z, 2500Z, EH>
BB
SW1
TPSG SW
TP801 RF V
TP802 RF A
SW2
MB
TU
LB
AGC
NC
+B
AFT
UB
HB
NC
NC
NC
SW3
AUDIO OUT
GND
AFT OUT
SIF
NC
NC
VIDEO OUT
TEST SIGNAL
SW801
OFF
ON
EVER 5V
REG 5V
Q803 REG
2SC2412KR
AGC
AFT BUFF
Q804 2SA1037KR (FR)
Q807
Q808
BUFFER
Q811 2SC2412KR (BR)
UNREG70V
GND
TU 9V
9V
REG5V
EVER5V
Q801 2SC2412KR (BR)
PWM
Q813 2SC2412KR (BR)
LPF
Q802 2SA1037KR (FR)
Q805 2SA1037KR (FR)
Q806 2SA1037KR (FR)
Q807, 808 AFT LEVEL
Q807 2SC2412KR (BR)
Q808 2SA1037KR (FR)
Q802 VHF LOW SW
Q805 UHF SW
Q806 VHF HIGI SW
TU 5V 1B
REG 5V 2B
TU 9V 3B
EVER 5V 4B
UNREG 70V 5B
REG GND 6B
TU PWM 7B
U BAND 8B
H BAND 9B
L BAND 10B
AFT DEF 11B
T MUTE 12B
AGC LEVEL 13B
AFT CURVE 14B
IIC SDA 15B
IIC SCK 16B
RF A 17B
TU L 18B
TU R 19B
TU V 20B
TO SS SECTION 1B-20B
◁ :VIDEO (PB) SIGNAL
◀ :AUDIO (PB) SIGNAL
○ :WAVEFORM NO.
◎ :CHECK RAND

WIRING – 2 (FRONT/HEAD AMP SECTION)



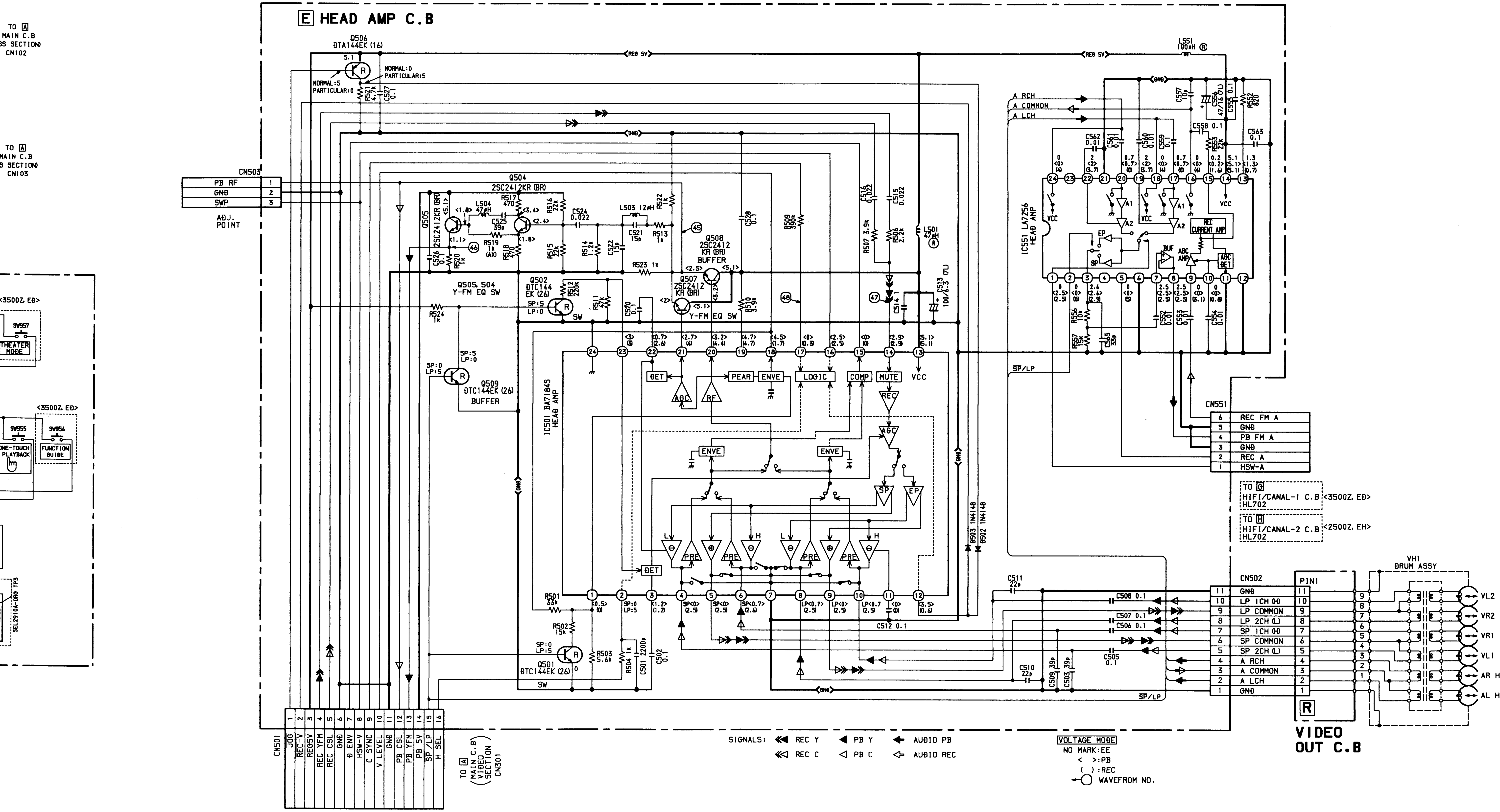
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J K
<3500Z, ED> TO G HIFI/CANAL-1 C.B HL702
<2500Z, EH> TO H HIFI/CANAL-2 C.B HL702
FCB702
<MARK>
E HEAD AMP C.B
CN551
CN503
CN502
CN501
IC551
IC501
TO AVH1 (HIFI AUDIO/VIDEO HEAD)
TO A MAIN C.B CN301
D FRONT-3 C.B
<HV-FX3500Z, ED>
D971～D976 ROTARY (SHUTTLE LIGHT)
CON971 (BT971)
IC971
<MARK>
F JACK C.B
<HV-FX3500Z, ED>
TO G HIFI/CANAL-1 C.B CN702
FCB701
<MARK>
HL701
J701-3
J701-2
J701-1
J701-3 R AUDIO IN
J701-2 L (MONO)
J701-1 VIDEO IN
C FRONT-2 C.B
SW952
SW951
SW953
SW955
SW956
SW954
SW957
D958
D959
D951
CN951
R952
<3500Z, ED>
SW952 EJECT
D958, SW955 ONE-TOUCH PLAYBACK
SW951 POWER STANDBY/ON
SW953 CHANNEL SW954
SW956 FUNCTION GUIDE <3500Z, ED>
D959, SW957 THEATRE MODE <3500Z, ED>
<3500Z, ED>
SW901 (JOG)
F FWD REW
<2500Z, EZ>
SW913 PLAY
SW912 STOP
B FRONT-1 C.B
D921～D930 (BACK LIGHT)
SW901 <3500Z, ED>
SW913
SW912
SW903
SW902
<3500Z, ED>
<2500Z, EH>
SW903 PLAY
SW902 STOP
IC903
SW904
SW905
<2500Z, EH>
SW906
SW907
SW911
SW910
CN901
TO A MAIN C.B CN102
<3500Z, ED>
<2500Z, EH>
IC902
IC901
X901
FL901
CN902
CN904
SERVICE MODE
TO A MAIN C.B CN103
SW904 F FWD
SW905 REW
<2500Z, EH>
SW907 SW906 <3500Z, ED>
PAUSE/STILL
REC/OTR
SW911 SW910 <2500Z, EH>
IC902 REMOTE SENSOR
FL901 (DISPLAY)

SCHEMATIC DIAGRAM – 4 (FRONT SECTION)

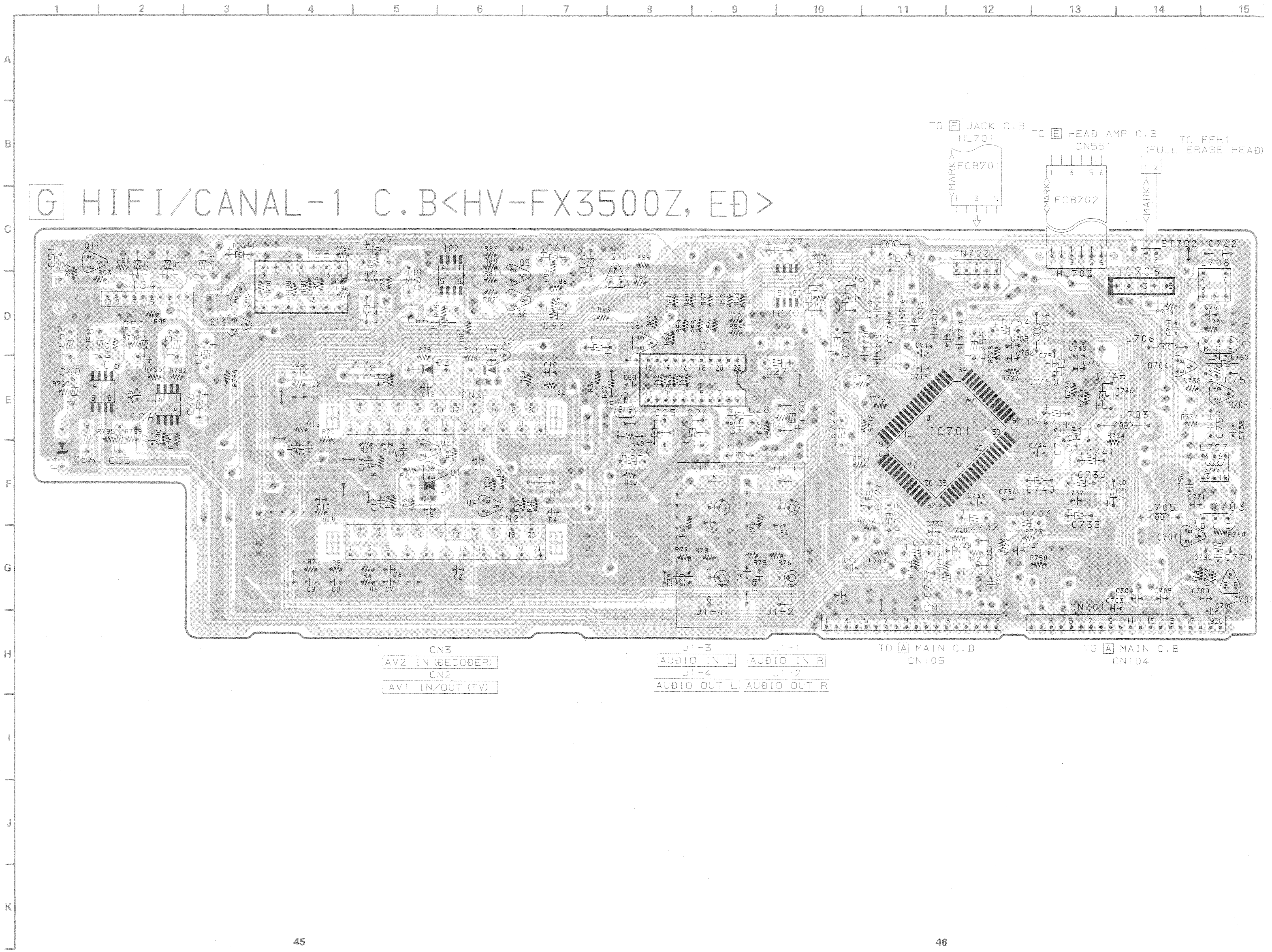


<2500Z EH>
B FRONT-1 C B
IC903 BU2092F LED DRIVER
VSS
DATA
CLOCK
LCK
Q0
Q1
Q2
Q3
Q4
VDD
Q11
Q10
Q9
Q8
Q7
Q6
Q5
D921
D922
D923
D924
D925
D926
D927
D928
R929 220
R930 220
R931 220
R932 220
R933 220
R934 220
R935 220
R936 220
Q902 DTA114 EK(14)
Q901 DTA114 EK(14)
R937 1.2k
R922 1.2k
R923 1.2k
R924 1.2k
R939 1.2k
R925 1.2k
D929
D930
PIN903 (CN903)
LED LCK
FL SCK
EVER 12V
FL DATA
EVER 5V
SS GND
CON971 (DT971)
IC902 GP1U581X
REMOTE SENSOR
C903 100/6.3 SL
C904 0.01
EVER 5V
EVER 12V
GND
C908 0.1/50
L901 10μH
R903 1k AX
R904 1k AX
R907 10k
R908 10k
R909 10k
R910 10k
R911 10k
R912 10k
R913 10k
IC901 IC MN12510F FL DRIVER
JIN1
JIN2
LED
T11
T10
T9
T8
T7
T6
T5
T4
NC
T3
T2
T1
T0
VPP
VDD
OSC
VSS
FL CS
FL SCK
FL DATA
FL SI
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
S0
K4
K3
K2
K1
K0
R905 100
X901 4MHz
C906 22/6.3
C905 0.01 AX
EVERSV
L902 10μH
EVER-25V
D901 HZ5C2
R906 100 AX
C907 1/50 SL
D908 1N4148
SERVICE
D902 1N4148
<3500Z ED>
D904 1N4148
D905 1N4148
D906 1N4148
STOP ■
SW902
SW912
PLAY ▷
SW903
SW913
<2500Z EH>
SW904
F FWD
SW905
REW
PAUSE/STILL
SW907
SW911
PAUSE/STILL ▮▮/▶▮
REC/OTR ●
SW906
SW910
D934 1N4148
D933 1N4148
D935 1N4148
AC3.5V
FL901 10BT-108GK (DISPLAY)
REC
PDC
VPS
LP
EP
INDEX
A-TR
VCR
NICAM
BIL
BAP
HI-FI
L
R
A-DUB
AM
PM
STEREO
CH MIX
SW901 ROTARY JOG
F FWD ▶▶
◀◀ REW
CN901
FL SI
SS GND
FL DATA
FL SCK
SS GND
SS GND
EVER 5V
FL CS
RMC
LED LCK
TO A MAIN C.B (SS SECTION) CN102
C902 0.01
C901 100/6.3
CN902
EVER 5V
SS GND
EVER 12V
REG GND
REG GND
AC 3.5V
AC 3.5V
SS GND
SS GND
EVER -25V
TO A MAIN C.B (SS SECTION) CN103
R901 27k
R902 27k
CN904
CN951
K4
S0
S2
K3
K2
K1
K0
OTPB
THEATER
EVER 5V
GND
C FRONT-2 C.B
SW951 POWER STANDBY/ON
SW952 EJECT ▲
SW957 THEATER MODE
SW953 CHANNEL ∧
SW954 CHANNEL ∨
SW955 ONE-TOUCH PLAYBACK
SW956 FUNCTION GUIDE
D958 ONE-TOUCH PLAYBACK
SLZ-381B-02T-AB-T2 P-GRN
R951 220
R952 270 AX
D959
Q951 DTC144EK (26)
THEATER MODE
SEL2910A-DR0 TP3
LED DRIVER
<3500A ED>
D FRONT-3 C.B
<HV-FX3500Z ED>
EVER12V
R971 1.5k
R972 10k
REG
Q971 2SA1162GR (SG)
R973 10k
R974 1.5k
Q972 2SA1162GR (SG)
C971 0.01
IC971 BU2092F LED DRIVER
R975 1.2k
R976 1.2k
R977 1.2k
R979 1.2k
R980 1.2k
R981 1.2k
R983 1.2k
R984 1.2k
R985 1.2k
R987 1.2k
R989 1.2k
R990 1.2k
R991 1.2k
R992 1.2k
R993 1.2k
R995 1.2k
R996 1.2k
R997 1.2k
D971
D972
D973
D974
D975
D976
D971 ~ D976 LED GL3ED8 (ROTARY SHUTTLE LIGHT)

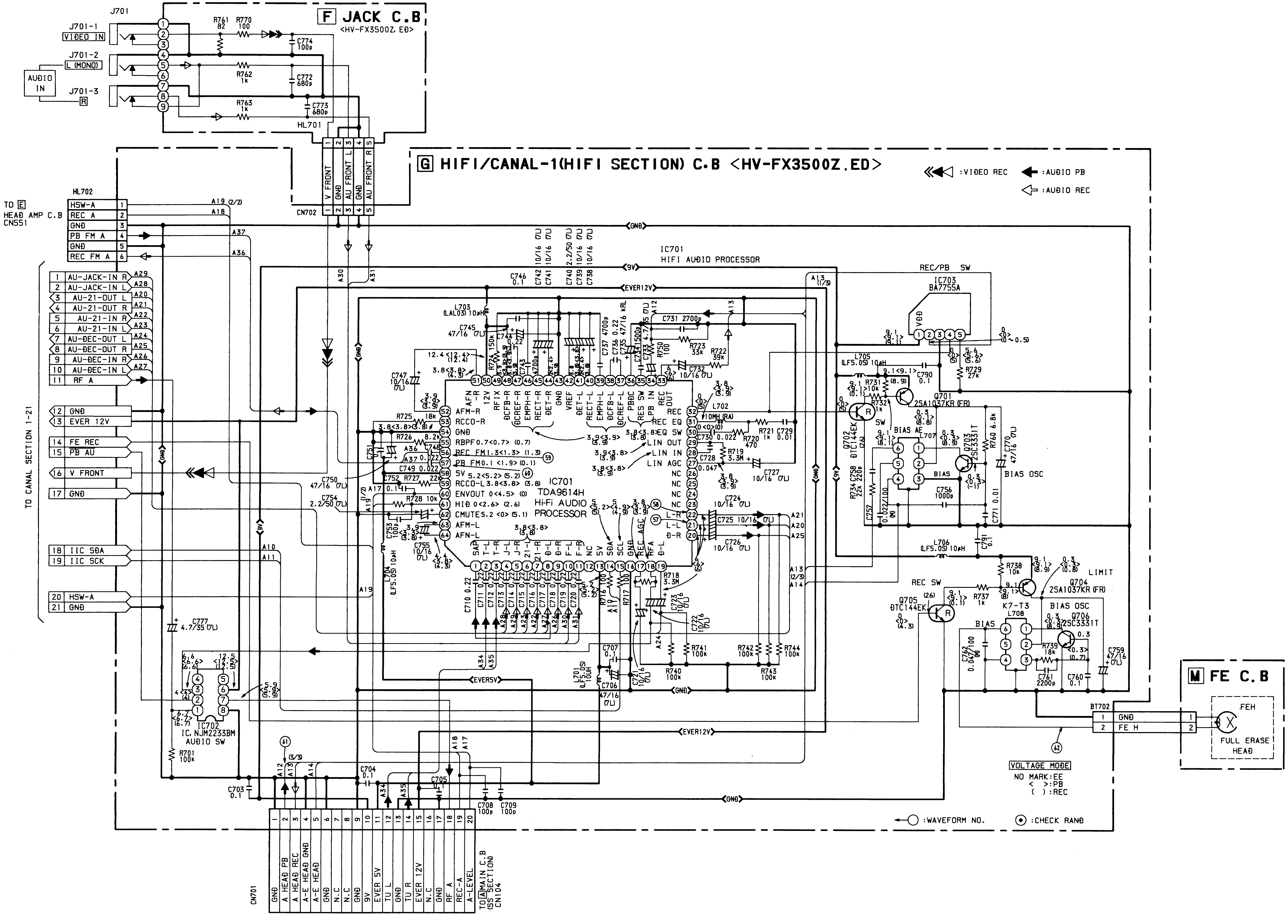
SCHEMATIC DIAGRAM – 5 (HEAD AMP SECTION)


E HEAD AMP C.B
Q506 DTA144EK (16)
NORMAL:0 PARTICULAR:5
NORMAL:5 PARTICULAR:0
R521 4.7k
C527 0.1
REG 5V
GND
CN503
PB RF
GND
SWP
ADJ. POINT
TO A MAIN C.B CN102
TO A MAIN C.B CN103
Q504 2SC2412KR (BR)
Q505 2SC2412KR (BR)
L504 47μH
R517 470
C525 39p
R519 1k
R518 470
R516 22k
C524 0.022
L503 12μH
R522 1k
C521 15p
R513 1k
R515 22k
R514 1.2k
C522 15p
R523 1k
C526 0.1
R520 1k
Q508 2SC2412 KR (BR) BUFFER
Q507 2SC2412 KR (BR)
Y-FM EQ SW
Q505, 504 Y-FM EQ SW
Q502 DTC144 EK (26)
SP:5 LP:0
SW
R512 220k
R511 47k
C520 0.1
R510 3.9k
C528 0.1
R509 390k
R507 3.9k
R506 2.2k
C516 0.022
C515 0.022
L501 47μH
C514 1
C513 100/6.3 (7L)
R524 1k
Q509 DTC144EK (26) BUFFER
SP:0 LP:5
IC501 BA7184S HEAD AMP
DET
AGC
RF
PEAR
ENVE
LOGIC
COMP
MUTE
VCC
REC
AGC
SP
EP
PRE
R501 33k
R502 15k
Q501 DTC144EK (26)
R503 5.6k
R504 1k
C501 2200p
C502 0.1
C512 0.1
C511 22p
C508 0.1
C507 0.1
C506 0.1
C505 0.1
C510 22p
C509 39p
C503 39p
D503 1N4148
D502 1N4148
SP/LP
CN501
JOG
REC-V
REG5V
REC YFM
REC CSL
GND
D ENV
HSW-V
C SYNC
V LEVEL
GND
PB CSL
PB YFM
PB 5V
SP /LP
H SEL
TO A MAIN C.B (VIDEO SECTION) CN301
L551 100μH
A RCH
A COMMON
A LCH
C557 10p
C556 47/16 (7L)
C555 0.1
R552 820
C558 0.1
R553 22k
C563 0.1
C562 0.01
C561 0.01
C560 0.01
C559 0.01
IC551 LA7256 HEAD AMP
VCC
A1
A2
EP
SP
REC CURRENT AMP
BUF
AGC AMP
AGC DET
R556 10k
R557 15k
C565 330p
C552 0.01
C553 0.01
C554 0.01
CN551
REC FM A
GND
PB FM A
GND
REC A
HSW-A
TO G HIFI/CANAL-1 C.B HL702 <3500Z EG>
TO H HIFI/CANAL-2 C.B HL702 <2500Z EH>
CN502
PIN1
GND
LP 1CH (H)
LP COMMON
LP 2CH (L)
SP 1CH (H)
SP COMMON
SP 2CH (L)
A RCH
A COMMON
A LCH
GND
VH1 DRUM ASSY
VL2 HEAD
VR2 HEAD
VR1 HEAD
VL1 HEAD
AR HEAD
AL HEAD
R VIDEO OUT C.B
<3500Z EG>
SW957 THEATER MODE
SW955 ONE-TOUCH PLAYBACK
SW956 FUNCTION GUIDE
SEL2910A-GR0 TP3
SIGNALS:
REC Y
REC C
PB Y
PB C
AUDIO PB
AUDIO REC
VOLTAGE MODE
NO MARK:EE
< >:PB
( ):REC
WAVEFROM NO.

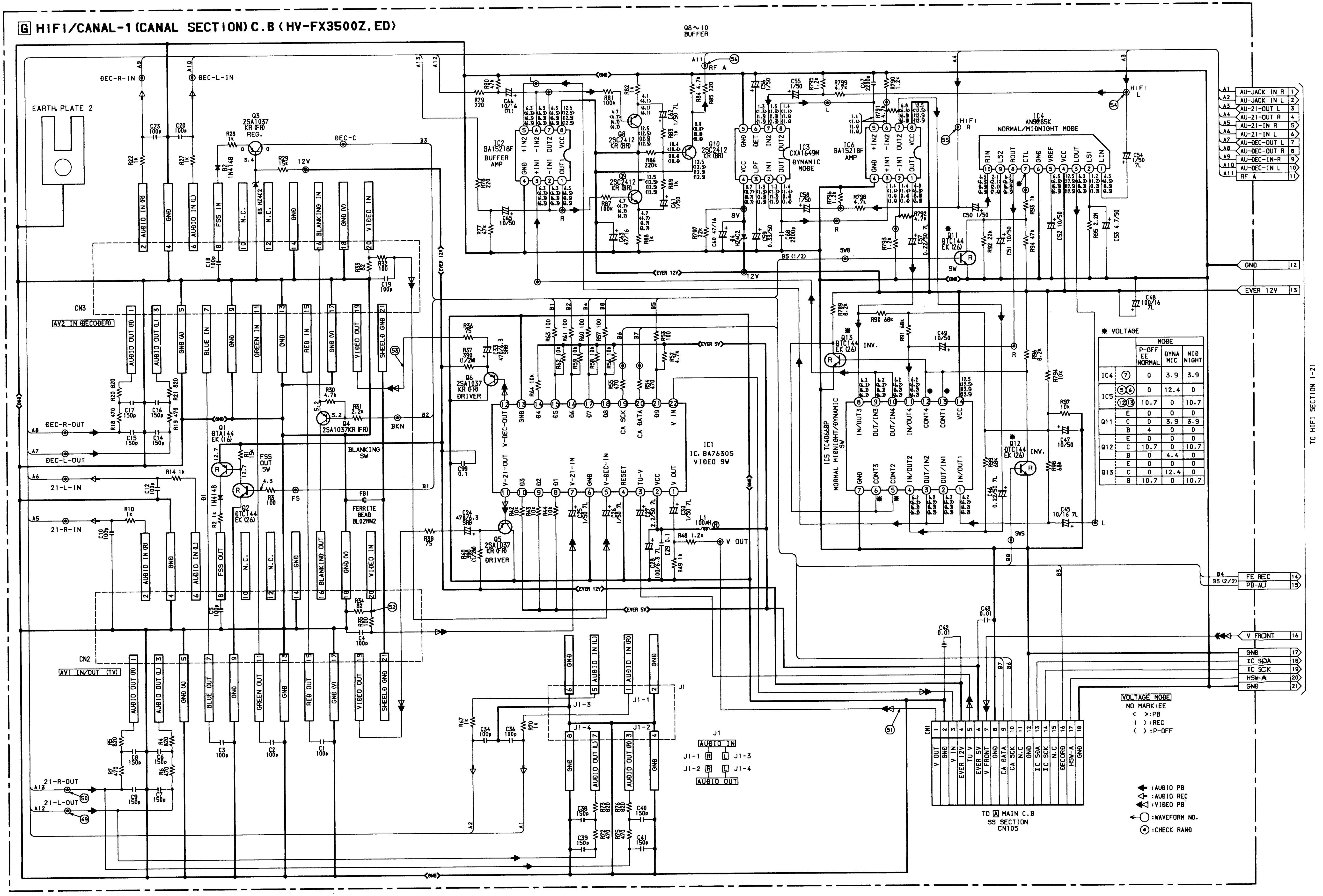
G HIFI/CANAL-1 C.B<HV-FX3500Z, EÐ>


TO F JACK C.B
HL701
FCB701
TO E HEAD AMP C.B
CN551
FCB702
TO FEH1
(FULL ERASE HEAD)
BT702
HL702
IC703
CN702
IC701
IC702
IC1
IC2
IC3
IC4
IC5
IC6
CN3
CN2
CN1
CN701
J1-1
J1-2
J1-3
J1-4
L701
L702
L703
L704
L705
L706
L707
L708
Q701
Q702
Q703
Q704
Q705
Q706
CN3
AV2 IN (DECODER)
CN2
AV1 IN/OUT (TV)
J1-3
AUDIO IN L
J1-4
AUDIO OUT L
J1-1
AUDIO IN R
J1-2
AUDIO OUT R
TO A MAIN C.B
CN105
TO A MAIN C.B
CN104

SCHEMATIC DIAGRAM – 6 (Hi-Fi SECTION) < HV-FX3500 >


J701
J701-1
VIDEO IN
J701-2
L (MONO)
AUDIO IN
J701-3
R
F JACK C.B
<HV-FX3500Z.ED>
R761 82
R770 100
C774 100p
R762 1k
C772 680p
R763 1k
C773 680p
HL701
V FRONT
GND
AU FRONT L
GND
AU FRONT R
CN702
G HIFI/CANAL-1(HIFI SECTION) C.B <HV-FX3500Z.ED>
:VIDEO REC
:AUDIO PB
:AUDIO REC
HL702
TO E HEAD AMP C.B CN551
HSW-A
REC A
GND
PB FM A
GND
REC FM A
AU-JACK-IN R
AU-JACK-IN L
AU-21-OUT L
AU-21-OUT R
AU-21-IN R
AU-21-IN L
AU-DEC-OUT L
AU-DEC-OUT R
AU-DEC-IN R
AU-DEC-IN L
RF A
GND
EVER 12V
FE REC
PB AU
V FRONT
GND
IIC SDA
IIC SCK
HSW-A
GND
TO CANAL SECTION 1-21
IC701
HIFI AUDIO PROCESSOR
IC701 TDA9614H Hi-Fi AUDIO PROCESSOR
REC/PB SW
IC703 BA7755A
Q701 2SA1037KR (FR)
Q702 DTC144EK
Q703 2SC3331T
BIAS OSC
L707
BIAS
SW
Q704 2SA1037KR (FR)
LIMIT
REC SW
Q705 DTC144EK
Q706 2SC3331T
L708
K7-T3
BIAS OSC
IC702 IC NJM2233BM AUDIO SW
R701 100k
C703 0.1
C704 0.1
C705
C708 100p
C709 100p
BT702
GND
FE H
M FE C.B
FEH
FULL ERASE HEAD
VOLTAGE MODE
NO MARK:EE
< >:PB
( ):REC
:WAVEFORM NO.
:CHECK LAND
CN701
GND
A HEAD PB
A HEAD REC
A-E HEAD GND
A-E HEAD
GND
N.C
N.C
GND
9V
EVER 5V
TU L
GND
TU R
EVER 12V
N.C
GND
RF A
REC-A
A-LEVEL
TO A MAIN C.B (SS SECTION) CN104
(GND)
(9V)
(EVER12V)
(EVER5V)

SCHEMATIC DIAGRAM – 7 (CANAL SECTION) < HV-FX3500 >

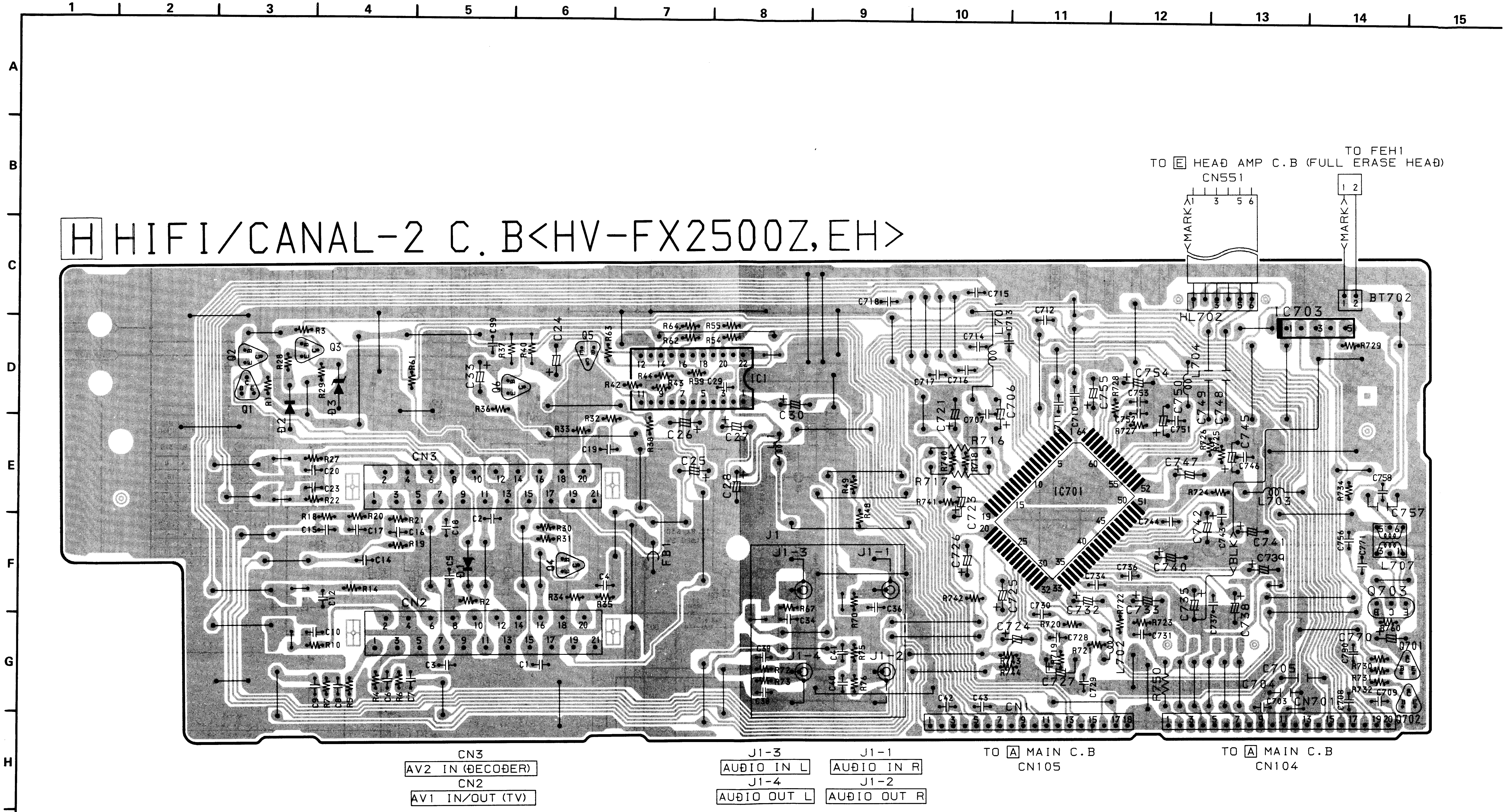

G HIFI/CANAL-1 (CANAL SECTION) C.B ⟨HV-FX3500Z.ED⟩
EARTH PLATE 2
DEC-R-IN
DEC-L-IN
DEC-C
Q3 2SA1037 KR (FR) REG.
D2 1N4148
D3 HZ4C2
CN3
AV2 IN (DECODER)
AUDIO IN (R)
GND
AUDIO IN (L)
FSS IN
N.C.
BLANKING IN
GND (V)
VIDEO IN
AUDIO OUT (R)
AUDIO OUT (L)
GND (A)
BLUE IN
GREEN IN
RED IN
VIDEO OUT
SHEELD GND
DEC-R-OUT
DEC-L-OUT
21-L-IN
21-R-IN
Q1 DTA144 EK (16)
Q2 DTC144 EK (26)
FSS OUT SW
Q4 2SA1037KR (FR)
BLANKING SW
BKN
FS
FB1 FERRITE BEAD BL02RN2
FSS OUT
BLANKING OUT
CN2
AV1 IN/OUT (TV)
BLUE OUT
GREEN OUT
RED OUT
21-R-OUT
21-L-OUT
Q6 2SA1037 KR (FR) DRIVER
Q5 2SA1037 KR (FR) DRIVER
IC1 IC BA7630S VIDEO SW
V-DEC-OUT
V-21-OUT
V-21-IN
V-DEC-IN
RESET
TU-V
VCC
V OUT
CA SCK
CA DATA
V IN
L1 100μH
EVER 12V
EVER 5V
Q8~10 BUFFER
RF A
IC2 BA15218F BUFFER AMP
Q8 2SC2412 KR (BR)
Q9 2SC2412 KR (BR)
Q10 2SC2412 KR (BR)
IC3 CXA1649M DYNAMIC MODE
IC6 BA15218F AMP
IC4 AN5285K NORMAL/MIDNIGHT MODE
HIFI L
HIFI R
Q11 DTC144 EK (26) SW
Q12 DTC144 EK (26) INV.
Q13 DTC144 EK (26) INV.
IC5 TC4066BP NORMAL MIDNIGHT/DYNAMIC SW
SW8
SW9
J1
J1-1
J1-2
J1-3
J1-4
AUDIO IN
AUDIO OUT
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
A1 AU-JACK IN R 1
A2 AU-JACK IN L 2
A3 AU-21-OUT L 3
A4 AU-21-OUT R 4
A5 AU-21-IN R 5
A6 AU-21-IN L 6
A7 AU-DEC-OUT L 7
A8 AU-DEC-OUT R 8
A9 AU-DEC-IN-R 9
A10 AU-DEC-IN L 10
A11 RF A 11
GND 12
EVER 12V 13
B4 FE REC 14
B5 (2/2) PB-AU 15
V FRONT 16
GND 17
IC SDA 18
IC SCK 19
HSW-A 20
GND 21
TO HIFI SECTION 1-21
CN1
1 V OUT
2 GND
3 V IN
4 EVER 12V
5 TU V
6 EVER 5V
7 V FRONT
8 GND
9 CA DATA
10 CA SCK
11 N.C
12 GND
13 IC SDA
14 IC SCK
15 N.C
16 DECORD
17 HSW-A
18 GND
TO A MAIN C.B SS SECTION CN105
(49)
(50)
(51)
(52)
(53)
(54)
(55)
(56)

✱ VOLTAGE

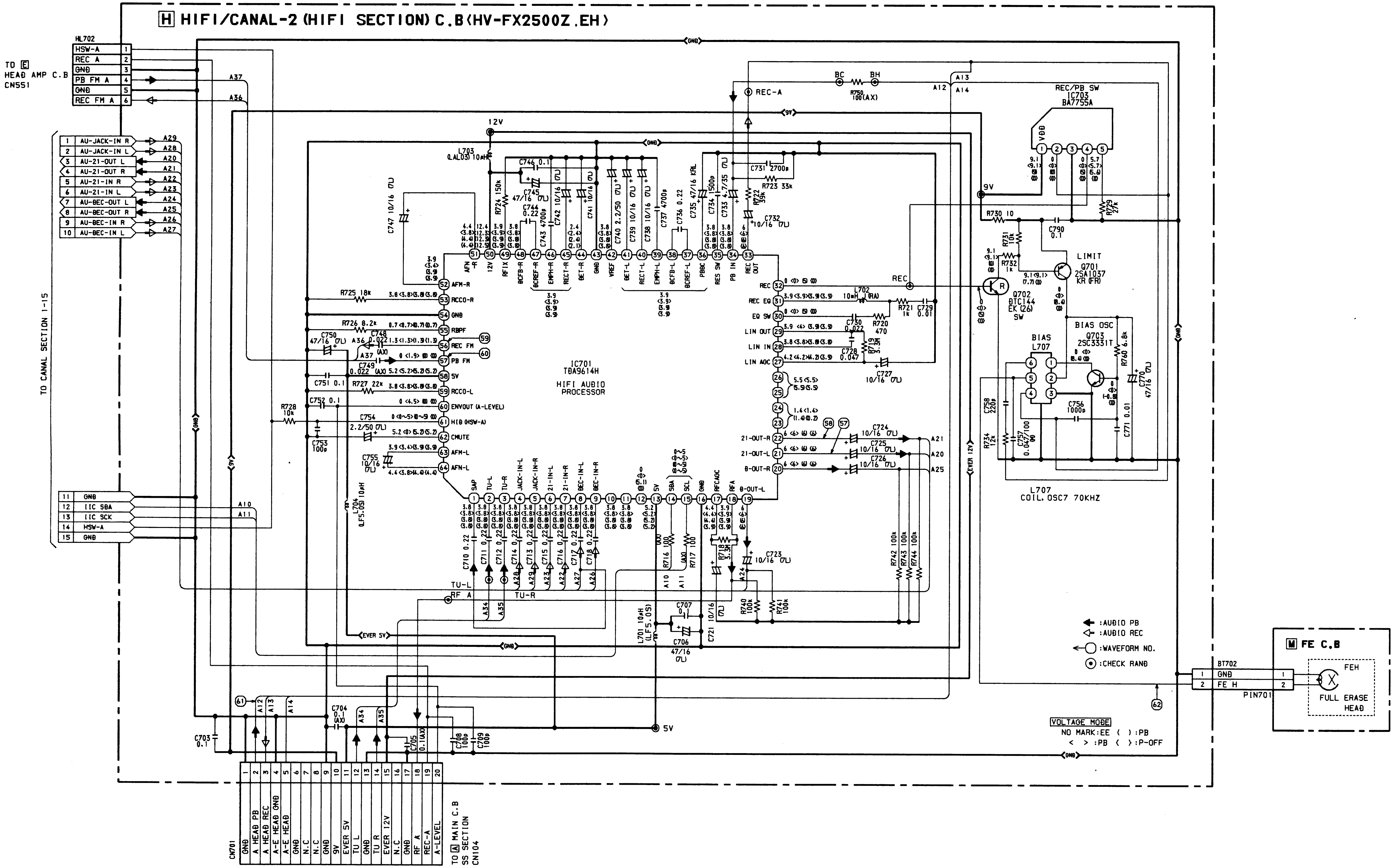
		MODE		
		P-OFF EE NORMAL	DYNAMIC	MIDNIGHT
IC4	⑦	0	3.9	3.9
IC5	⑤⑥	0	12.4	0
	⑫⑬	10.7	0	10.7
Q11	E	0	0	0
	C	0	3.9	3.9
	B	4	0	0
Q12	E	0	0	0
	C	10.7	0	10.7
	B	0	4.4	0
Q13	E	0	0	0
	C	0	12.4	0
	B	10.7	0	10.7

VOLTAGE MODE
NO MARK:EE
< >:PB
( ):REC
⟨ ⟩:P-OFF

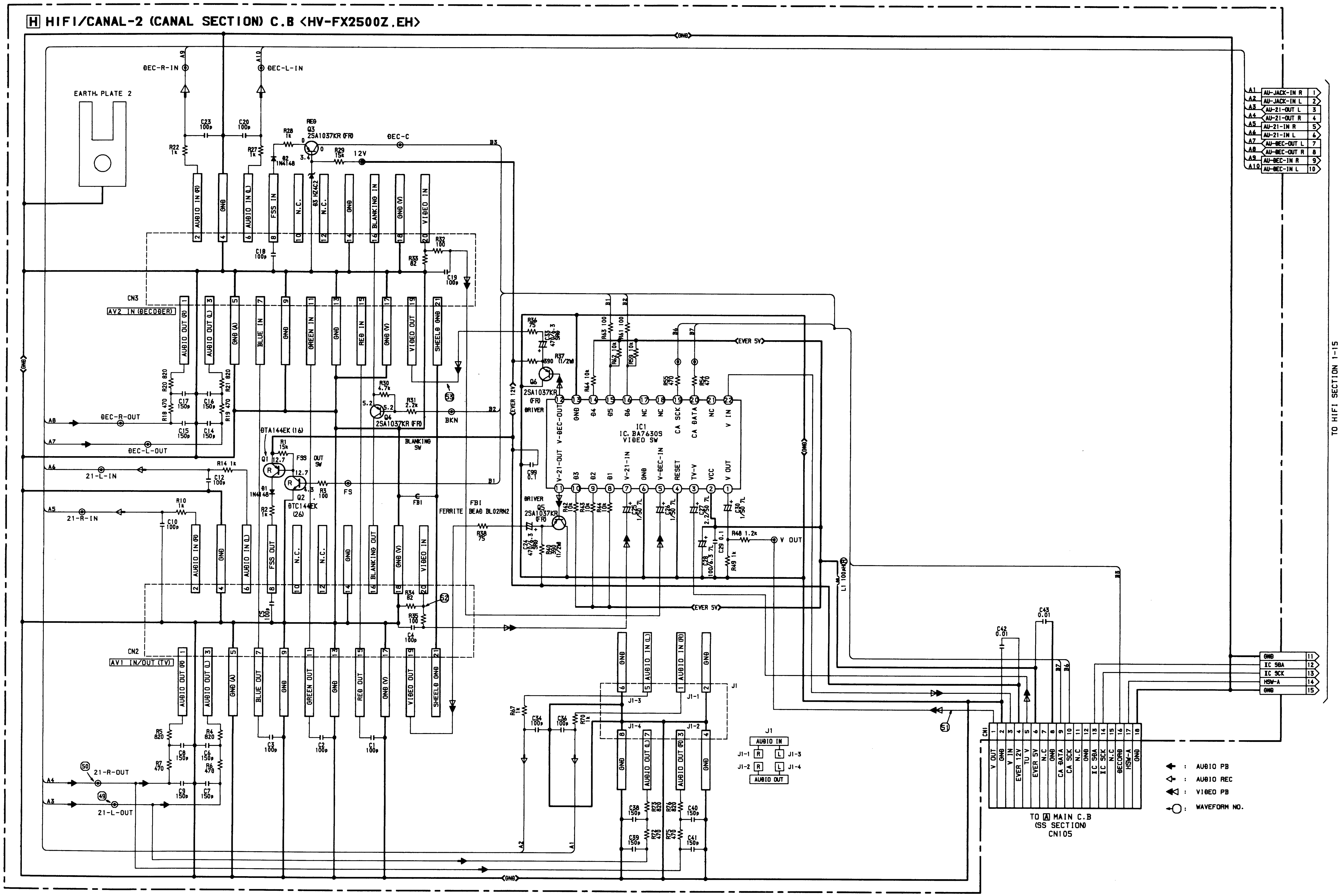
◀ :AUDIO PB
◁ :AUDIO REC
◀◁ :VIDEO PB
←○ :WAVEFORM NO.
⊙ :CHECK RAND


H HIFI/CANAL-2 C.B<HV-FX2500Z,EH>
TO FEH1
TO E HEAD AMP C.B (FULL ERASE HEAD)
CN551
<MARK>
HL702
BT702
IC703
IC701
IC1
CN3
CN2
J1
J1-3
J1-1
J1-4
J1-2
FB1
CN1
CN701
L701
L702
L703
L704
L707
Q701
Q702
Q703
CN3
AV2 IN (DECODER)
CN2
AV1 IN/OUT (TV)
J1-3
AUDIO IN L
J1-4
AUDIO OUT L
J1-1
AUDIO IN R
J1-2
AUDIO OUT R
TO A MAIN C.B
CN105
TO A MAIN C.B
CN104
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
K

SCHEMATIC DIAGRAM – 8 (Hi-Fi – 2 SECTION) < HV-FX2500 >

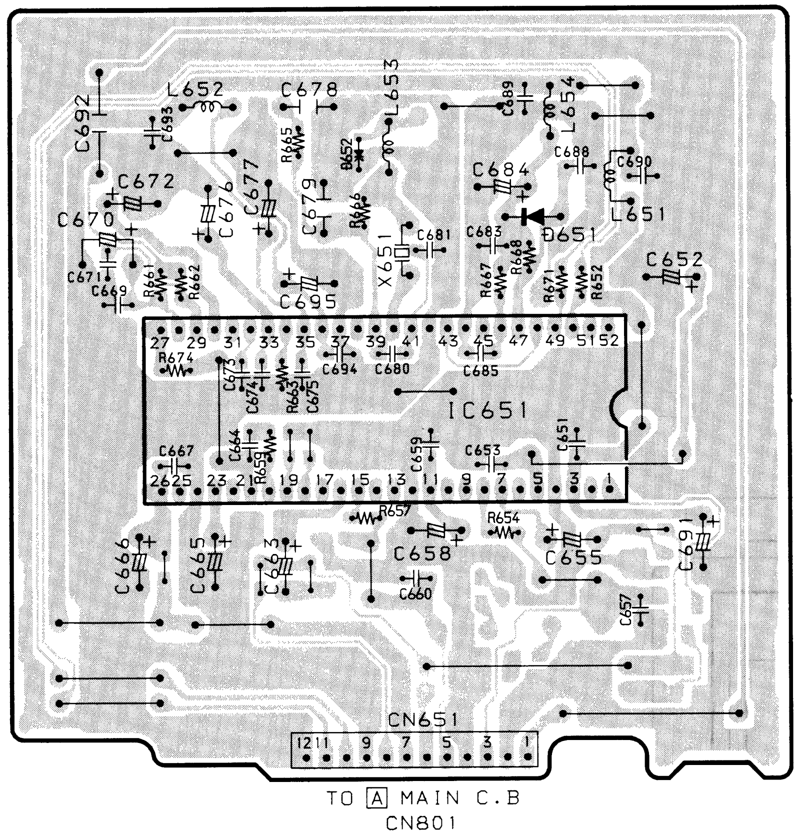

H HIFI/CANAL-2 (HIFI SECTION) C.B (HV-FX2500Z.EH)
TO E HEAD AMP C.B CN551
HL702
1 HSW-A
2 REC A
3 GND
4 PB FM A
5 GND
6 REC FM A
TO CANAL SECTION 1-15
1 AU-JACK-IN R
2 AU-JACK-IN L
3 AU-21-OUT L
4 AU-21-OUT R
5 AU-21-IN R
6 AU-21-IN L
7 AU-DEC-OUT L
8 AU-DEC-OUT R
9 AU-DEC-IN R
10 AU-DEC-IN L
11 GND
12 IIC SDA
13 IIC SCK
14 HSW-A
15 GND
IC701
TDA9614H
HIFI AUDIO PROCESSOR
12V
9V
5V
EVER 5V
EVER 12V
REC/PB SW
IC703
BA7755A
LIMIT
Q701
2SA1037
KR (FR)
Q702
DTC144
EK (26)
SW
BIAS OSC
Q703
2SC3331T
BIAS
L707
L707
COIL, OSC7 70KHZ
REC-A
REC
TU-L
RF A
TU-R
← :AUDIO PB
← :AUDIO REC
○ :WAVEFORM NO.
◉ :CHECK RAND
VOLTAGE MODE
NO MARK:EE ( ):PB
< >:PB ( ):P-OFF
M FE C.B
BT702
1 GND
2 FE H
PIN701
FEH
FULL ERASE HEAD
CN701
1 GND
2 A HEAD PB
3 A HEAD REC
4 A-E HEAD GND
5 A-E HEAD
6 GND
7 N.C
8 N.C
9 GND
10 9V
11 EVER 5V
12 TU L
13 GND
14 TU R
15 EVER 12V
16 N.C
17 GND
18 RF A
19 REC-A
20 A-LEVEL
TO A MAIN C.B SS SECTION CN104

SCHEMATIC DIAGRAM – 9 (CANAL SECTION) < HV-FX2500 >

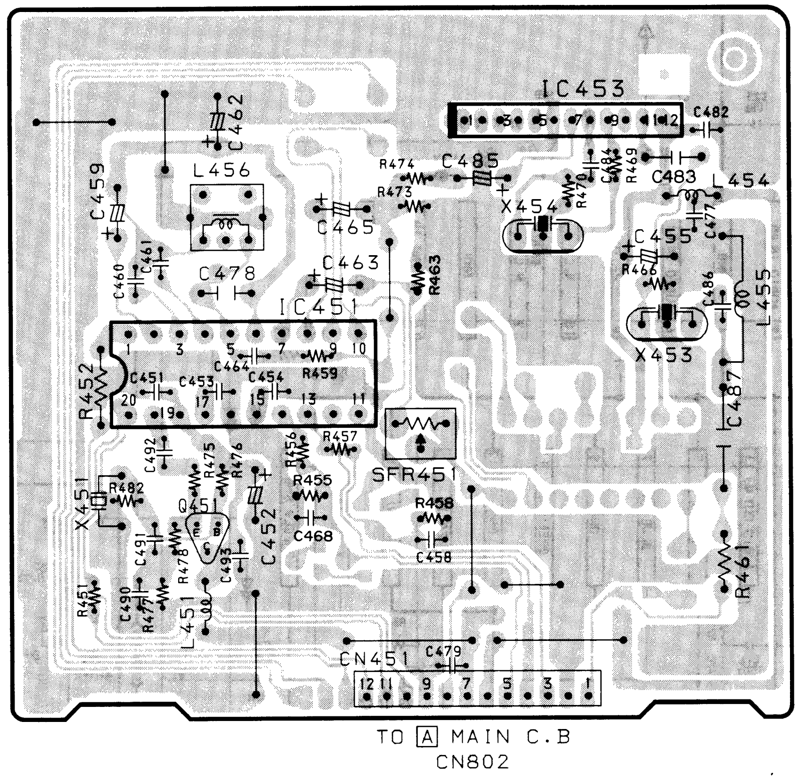


H HIFI/CANAL-2 (CANAL SECTION) C.B <HV-FX2500Z.EH>
EARTH PLATE 2
DEC-R-IN
DEC-L-IN
DEC-C
A9
A10
C23 100p
C20 100p
R22 1k
R27 1k
R28 1k
REG
Q3 2SA1037KR (FR)
R29 15k
12V
D2 1N4148
D3 HZ4C2
AUDIO IN (R)
GND
AUDIO IN (L)
FSS IN
N.C.
BLANKING IN
GND (V)
VIDEO IN
C18 100p
R32 100
R33 82
C19 100p
CN3
AV2 IN (DECODER)
AUDIO OUT (R)
AUDIO OUT (L)
GND (A)
BLUE IN
GREEN IN
RED IN
VIDEO OUT
SHEELD GND
R20 820
R21 820
R18 470
R19 470
C17 150p
C16 150p
C15 150p
C14 150p
DEC-R-OUT
DEC-L-OUT
A8
A7
A6
A5
A4
A3
21-L-IN
21-R-IN
R14 1k
C12 100p
R10 1k
C10 100p
DTA144EK (16)
Q1
R1 15k
FSS
OUT SW
Q2
DTC144EK (26)
D1 1N4148
R2 1k
R3 100
FS
R30 4.7k
R31 2.2k
Q4 2SA1037KR (FR)
BKN
BLANKING SW
(53)
B1
B2
B3
FSS OUT
BLANKING OUT
C5 100p
R34 82
R35 100
C4 100p
(52)
FB1
FERRITE BEAD BL02RN2
R38 75
CN2
AV1 IN/OUT (TV)
BLUE OUT
GREEN OUT
RED OUT
C3 100p
C2 100p
C1 100p
R5 820
R4 820
C8 150p
C6 150p
R7 470
R6 470
C9 150p
C7 150p
(50) 21-R-OUT
(49) 21-L-OUT
<GND>
<EVER 12V>
R36 75
C33 470/6.3 SRD
R37 390 (1/2W)
Q6 2SA1037KR (FR) DRIVER
Q5 2SA1037KR (FR) DRIVER
C24 470/6.3 SRD
R40 390 (1/2W)
C99 0.1
IC1 IC, BA7630S VIDEO SW
1 V OUT
2 VCC
3 TV-V
4 RESET
5 V-DEC-IN
6 GND
7 V-21-IN
8 D1
9 D2
10 D3
11 V-21-OUT
12 V-DEC-OUT
13 GND
14 D4
15 D5
16 D6
17 NC
18 NC
19 CA SCK
20 CA DATA
21 NC
22 V IN
R63 100
R61 100
R62 10k
R59 10k
R64 10k
R55 470
R54 470
B6
B7
<EVER 5V>
R42 10k
R43 10k
R44 10k
C25 1/50 7L
C26 1/50 7L
C27 2.2/50 7L
C30 1/50 7L
C28 100/6.3 7L
C29 0.1
R48 1.2k
R49 1k
V OUT
L1 100μH
C42 0.01
C43 0.01
(51)
R67 1k
C34 100p
C36 100p
R70 1k
J1
J1-1
J1-2
J1-3
J1-4
AUDIO OUT (L)
AUDIO OUT (R)
C38 150p
C39 150p
C40 150p
C41 150p
R73 820
R72 470
R76 820
R75 470
A1
A2
J1 AUDIO IN
J1-1 R L J1-3
J1-2 R L J1-4
AUDIO OUT
A1 AU-JACK-IN R 1
A2 AU-JACK-IN L 2
A3 AU-21-OUT L 3
A4 AU-21-OUT R 4
A5 AU-21-IN R 5
A6 AU-21-IN L 6
A7 AU-DEC-OUT L 7
A8 AU-DEC-OUT R 8
A9 AU-DEC-IN R 9
A10 AU-DEC-IN L 10
GND 11
IC SDA 12
IC SCK 13
HSW-A 14
GND 15
TO HIFI SECTION 1-15
CN1
1 V OUT
2 GND
3 V IN
4 EVER 12V
5 TU V
6 EVER 5V
7 N.C
8 GND
9 CA DATA
10 CA SCK
11 N.C
12 GND
13 IC SDA
14 IC SCK
15 N.C
16 DECORD
17 HSW-A
18 GND
TO A MAIN C.B (SS SECTION) CN105
: AUDIO PB
: AUDIO REC
: VIDEO PB
: WAVEFORM NO.

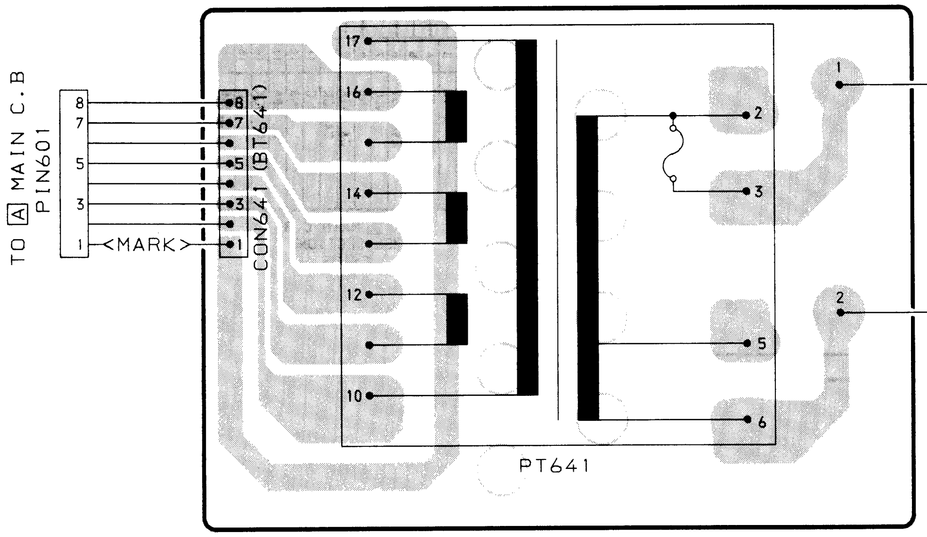
J NICAM C.B
<HV-FX3500EĐ>


L652
C678
L653
C689
L654
C692
C693
C665
R665
C672
C676
C677
C679
R652
R666
C684
C688
C690
C670
D651
L651
C671
C669
R661
R662
X651
C681
C683
R667
R668
R671
R652
C652
C695
IC651
R674
C673
C674
C675
C694
C680
C685
C667
C664
C659
C653
C651
R657
R654
C666
C665
C663
C658
C655
C691
C660
C657
CN651
TO A MAIN C.B
CN801

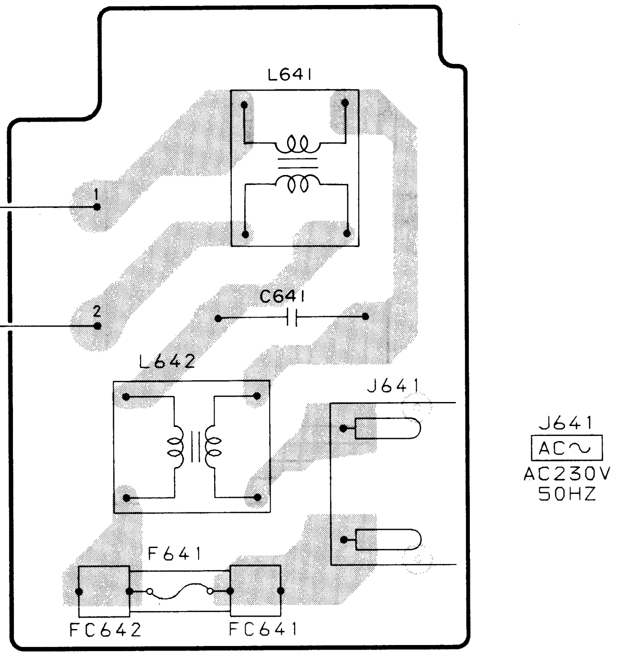
<HV-FX3500Z>
I ZWEITON C.B<HV-FX2500Z,EH>


IC453
C462
C482
C459
L456
R474
C485
R469
C483
L454
R473
C465
X454
R470
C478
C461
C460
C463
R463
C455
C477
R466
C486
L455
IC451
X453
R452
C451
C453
C464
C454
R459
C487
C492
R475
R476
R456
R457
SFR451
X451
R482
R455
R458
Q451
C452
C468
C458
C491
R478
C493
R461
R451
C490
R477
L451
CN451
C479
TO A MAIN C.B
CN802

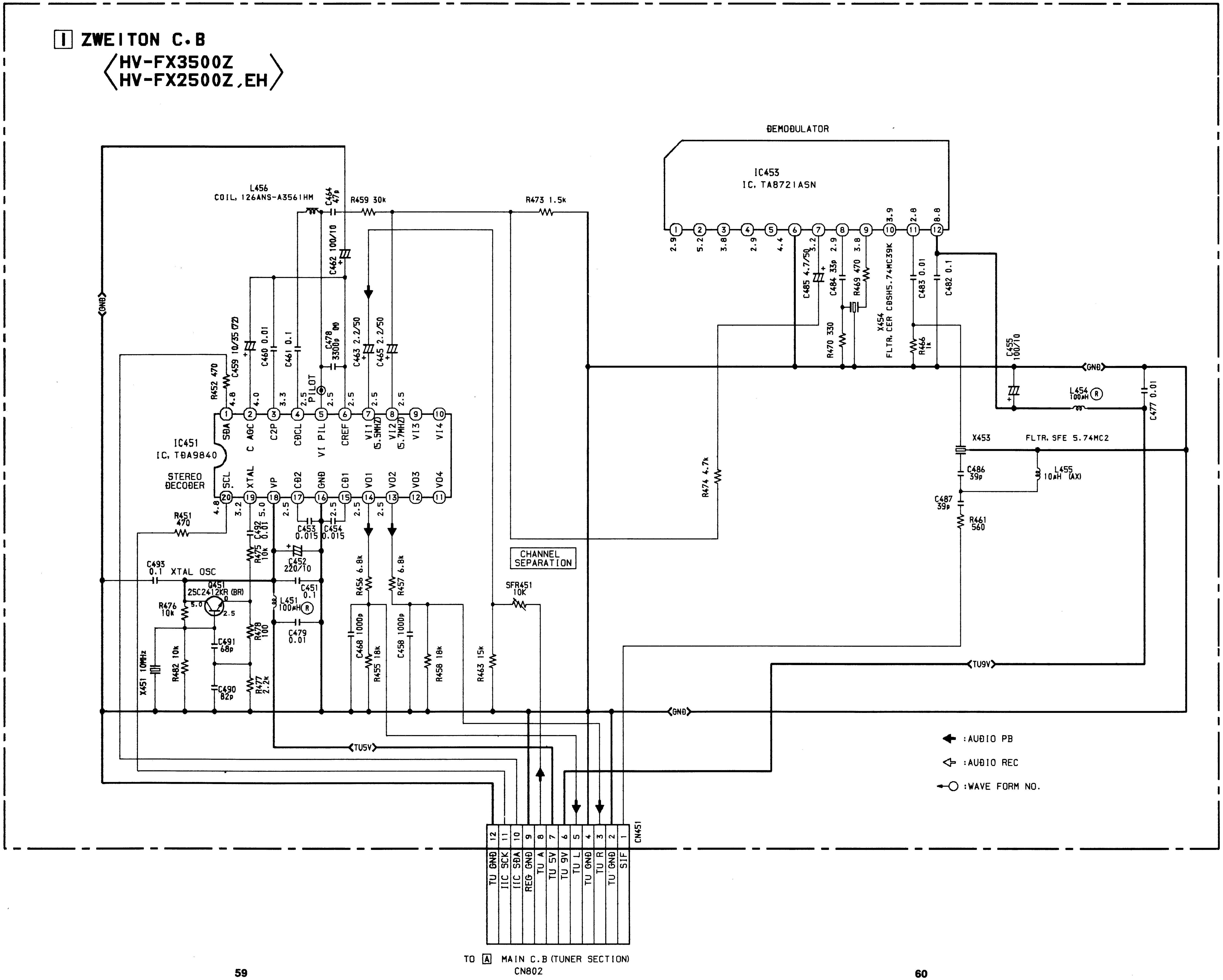
L POWER-2 C.B


TO A MAIN C.B
PIN601
<MARK>
CON641 (BT641)
PT641
<GRN>
<YEL>

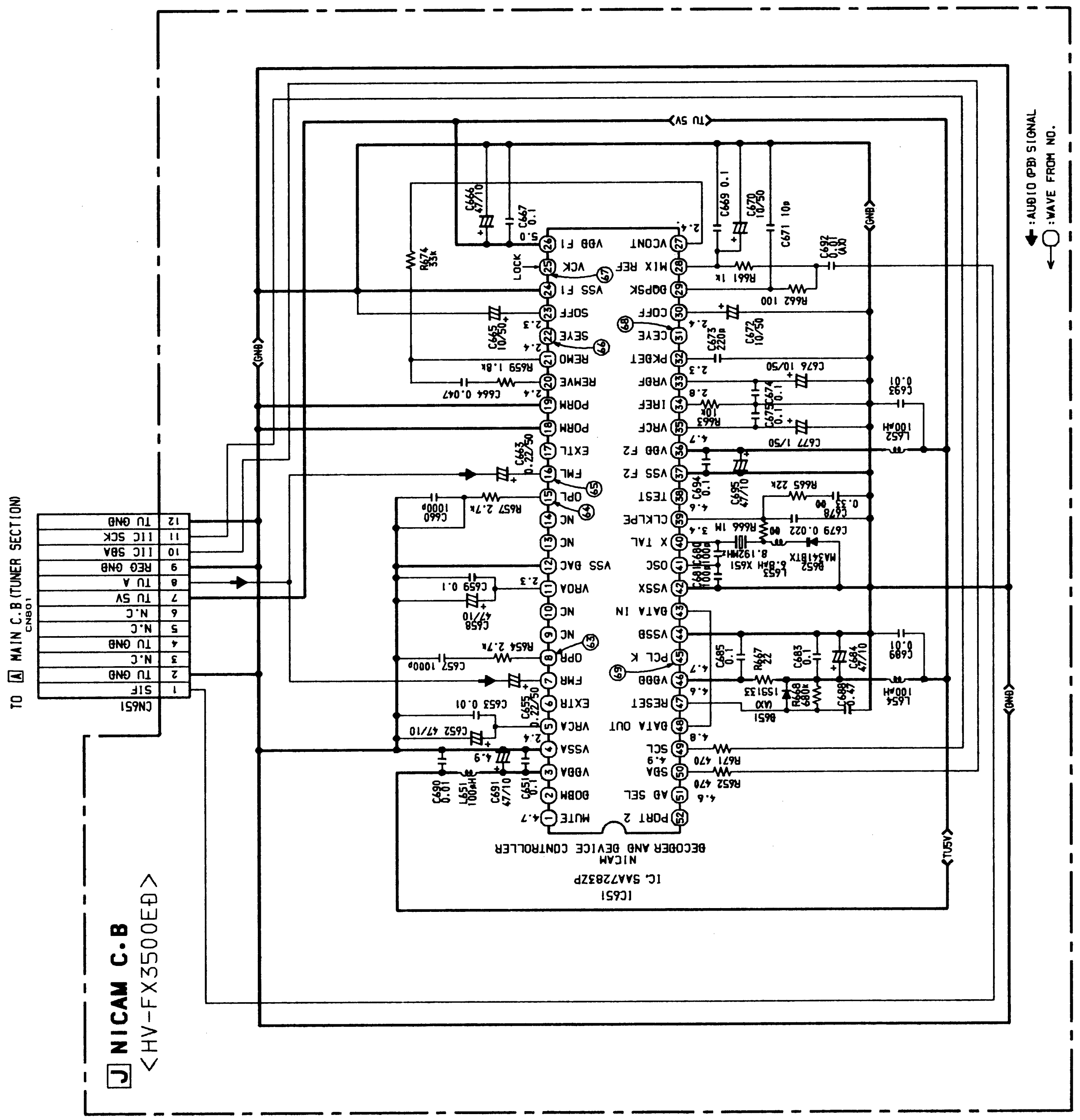
K POWER-1 C.B


L641
C641
L642
J641
F641
FC642
FC641
J641
AC~
AC230V
50HZ

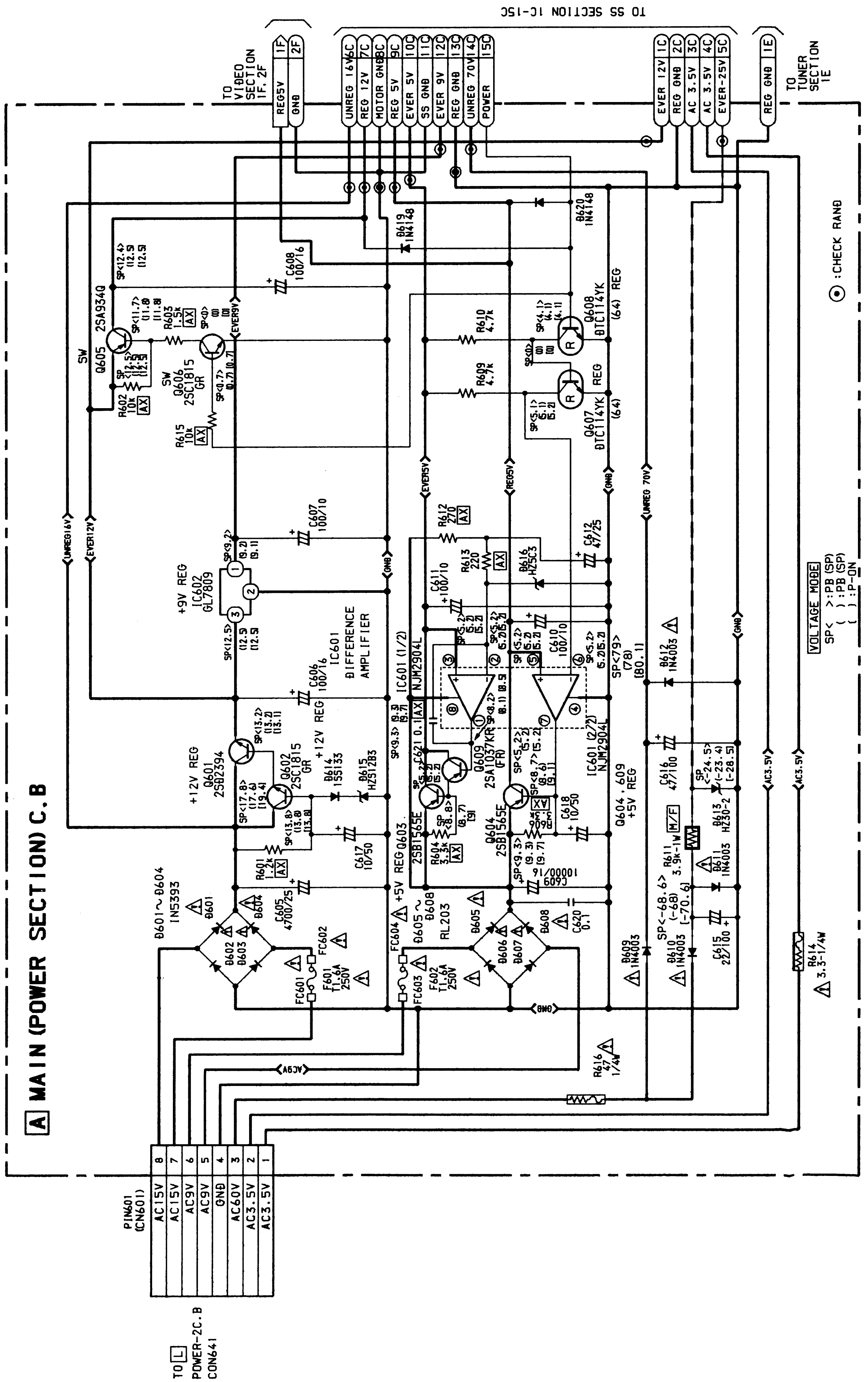
SCHEMATIC DIAGRAM – 10 (ZWEITON SECTION)

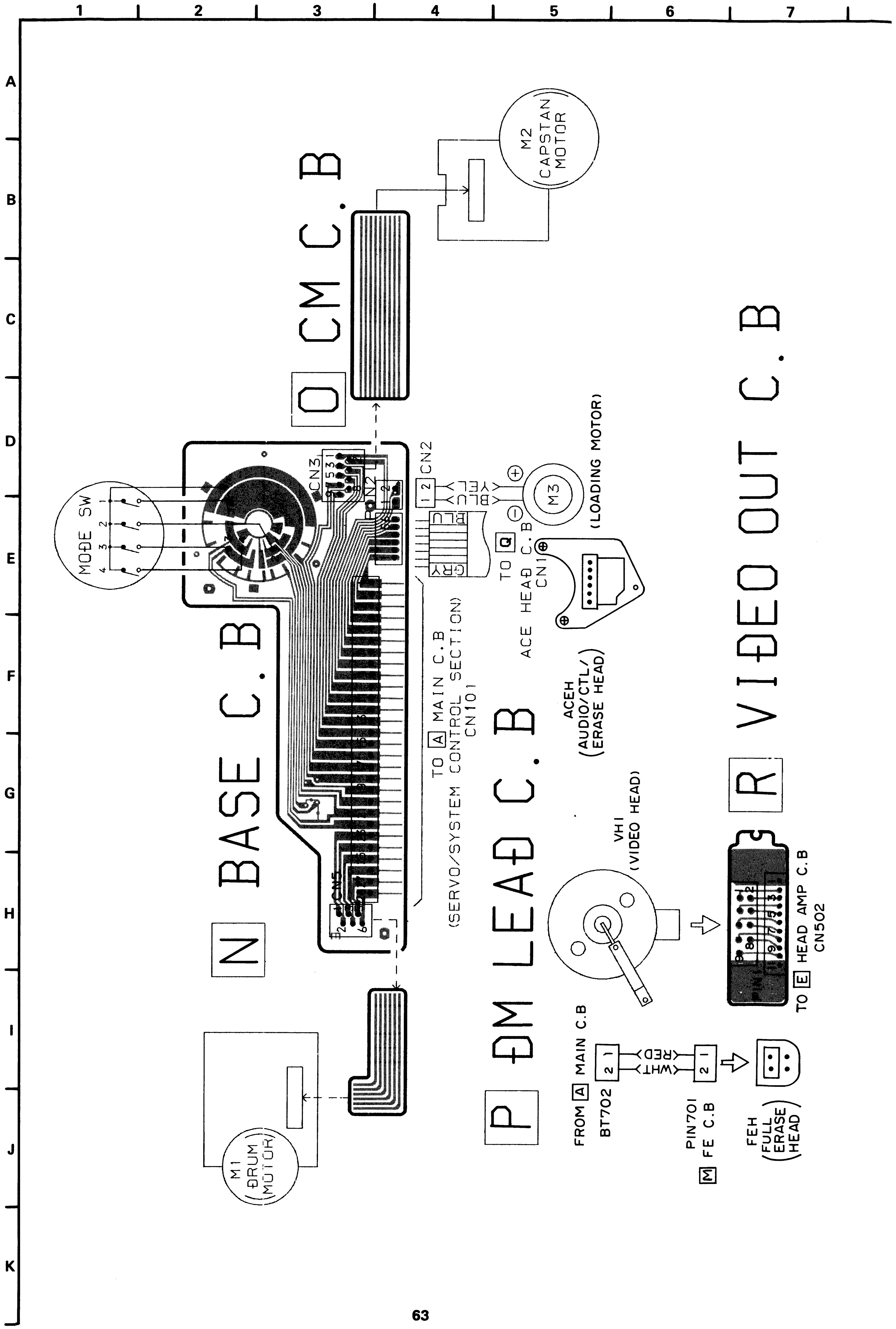

I ZWEITON C.B
HV-FX3500Z
HV-FX2500Z,EH
DEMODULATOR
IC453
IC, TA8721ASN
IC451
IC, TDA9840
STEREO DECODER
L456 COIL, 126ANS-A3561HM
C464 47p
R459 30k
R473 1.5k
C462 100/10
C459 10/35 (TZ)
C460 0.01
C461 0.1
C478 3300p (M)
C463 2.2/50
C465 2.2/50
R452 470
PILOT
SDA
C AGC
C2P
CDCL
VI PIL
CREF
VI1 (5.5MHZ)
VI2 (5.7MHZ)
VI3
VI4
SCL
XTAL
VP
CD2
GND
CD1
VO1
VO2
VO3
VO4
R451 470
C492 0.01
R475 10k
C453 0.015
C454 0.015
C452 220/10
C493 0.1
XTAL OSC
Q451 2SC2412KR (BR)
C451 0.1
L451 100µH R
R476 10k
C479 0.01
C491 68p
R478 100
X451 10MHz
R482 10k
C490 82p
R477 2.2k
R456 6.8k
R457 6.8k
C468 1000p
R455 18k
C458 1000p
R458 18k
R463 15k
SFR451 10K
CHANNEL SEPARATION
R474 4.7k
C485 4.7/50
C484 33p
R469 470
R470 330
X454 FLTR, CER CDSH5.74MC39K
C483 0.01
R466 1k
C482 0.1
C455 100/10
L454 100µH R
C477 0.01
X453
FLTR, SFE 5.74MC2
C486 39p
L455 10µH (AX)
C487 39p
R461 560
GND
TU9V
TU5V
:AUDIO PB
:AUDIO REC
:WAVE FORM NO.
CN451
12 TU GND
11 IIC SCK
10 IIC SDA
9 REG GND
8 TU A
7 TU 5V
6 TU 9V
5 TU L
4 TU GND
3 TU R
2 TU GND
1 SIF
TO A MAIN C.B (TUNER SECTION)
CN802

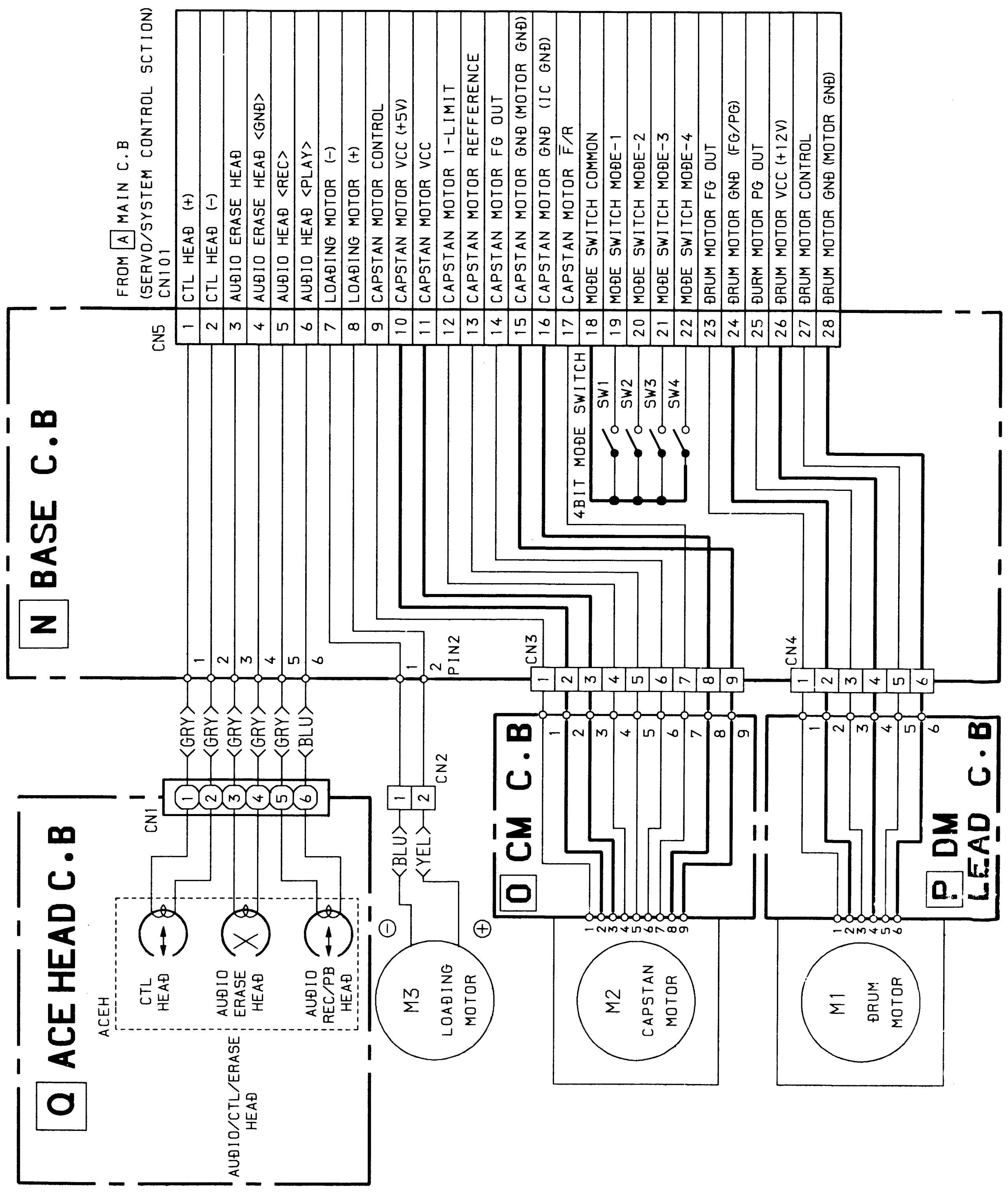
SCHEMATIC DIAGRAM – 11 (NICAM SECTION) < HV-FX3500 >


J NICAM C.B
<HV-FX3500ED>
TO A MAIN C.B (TUNER SECTION) CN801
CN651
IC651
IC SAA7283ZP
NICAM
DECODER AND DEVICE CONTROLLER
:AUDIO (PB) SIGNAL
:WAVE FROM NO.

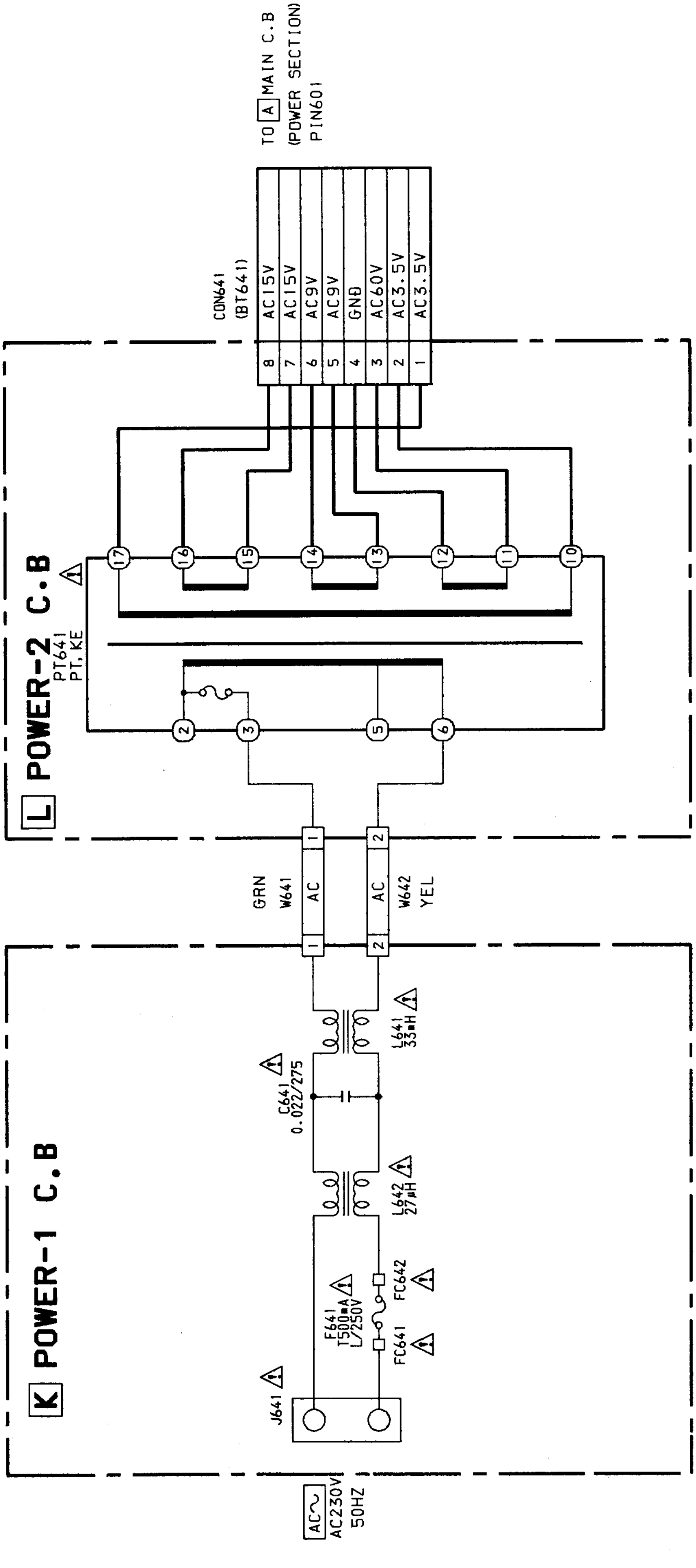
SCHEMATIC DIAGRAM – 12 (POWER SECTION)


A MAIN (POWER SECTION) C.B
TO SS SECTION 1C-15C
TO VIDEO SECTION 1F, 2F
TO TUNER SECTION 1E
:CHECK RAND
VOLTAGE MODE
SP< >:PB (SP)
( ):PB (SP)
[ ]:P-ON
IC601 DIFFERENCE AMPLIFIER
+9V REG IC602 GL7809
+12V REG Q601 2SB2394
Q604, 609 +5V REG
PIN601 (CN601)
TO L POWER-2C.B CON641


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
K
N BASE C.B
O CM C.B
P DM LEAD C.B
R VIDEO OUT C.B
M2 CAPSTAN MOTOR
M3 (LOADING MOTOR)
M1 (DRUM MOTOR)
MODE SW
CN2
CN3
CN5
CN1
YEL
BLU
GRY
TO Q ACE HEAD C.B CN1
ACE HEAD
ACEH (AUDIO/CTL/ERASE HEAD)
TO A MAIN C.B (SERVO/SYSTEM CONTROL SECTION) CN101
VH1 (VIDEO HEAD)
TO E HEAD AMP C.B CN502
FROM A MAIN C.B BT702
PIN701 M FE C.B
FEH (FULL ERASE HEAD)
RED
WHT


FROM A MAIN C.B (SERVO/SYSTEM CONTROL SCTION) CN101
CN5
1 CTL HEAD (+)
2 CTL HEAD (-)
3 AUDIO ERASE HEAD
4 AUDIO ERASE HEAD <GND>
5 AUDIO HEAD <REC>
6 AUDIO HEAD <PLAY>
7 LOADING MOTOR (-)
8 LOADING MOTOR (+)
9 CAPSTAN MOTOR CONTROL
10 CAPSTAN MOTOR VCC (+5V)
11 CAPSTAN MOTOR VCC
12 CAPSTAN MOTOR 1-LIMIT
13 CAPSTAN MOTOR REFFERENCE
14 CAPSTAN MOTOR FG OUT
15 CAPSTAN MOTOR GND (MOTOR GND)
16 CAPSTAN MOTOR GND (IC GND)
17 CAPSTAN MOTOR F/R
18 MODE SWITCH COMMON
19 MODE SWITCH MODE-1
20 MODE SWITCH MODE-2
21 MODE SWITCH MODE-3
22 MODE SWITCH MODE-4
23 DRUM MOTOR FG OUT
24 DRUM MOTOR GND (FG/PG)
25 DURM MOTOR PG OUT
26 DRUM MOTOR VCC (+12V)
27 DRUM MOTOR CONTROL
28 DRUM MOTOR GND (MOTOR GND)
N BASE C.B
4BIT MODE SWITCH
SW1
SW2
SW3
SW4
PIN2
CN3
CN4
<GRY>
<BLU>
<YEL>
CN1
CN2
Q ACE HEAD C.B
ACEH
CTL HEAD
AUDIO ERASE HEAD
AUDIO REC/PB HEAD
AUDIO/CTL/ERASE HEAD
M3 LOADING MOTOR
O CM C.B
M2 CAPSTAN MOTOR
P DM LEAD C.B
M1 DRUM MOTOR

SCHEMATIC DIAGRAM – 14 (POWER SECTION)


TO A MAIN C.B
(POWER SECTION)
PIN601
CON641
(BT641)
AC15V
AC15V
AC9V
AC9V
GND
AC60V
AC3.5V
AC3.5V
8
7
6
5
4
3
2
1
L POWER-2 C.B
PT641
PT,KE
17
16
15
14
13
12
11
10
2
3
5
6
GRN
W641
AC
AC
W642
YEL
K POWER-1 C.B
L641
33mH
C641
0.022/275
L642
27μH
F641
T500mA
L/250V
FC641
FC642
J641
AC~
AC230V
50HZ

WAVE FORM

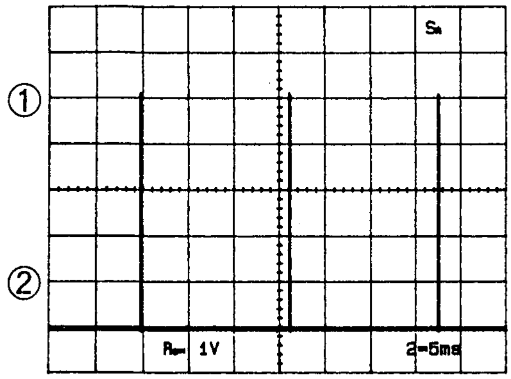
(VIDEO SECTION)

MODE : REC

INPUT : COLOR BAR

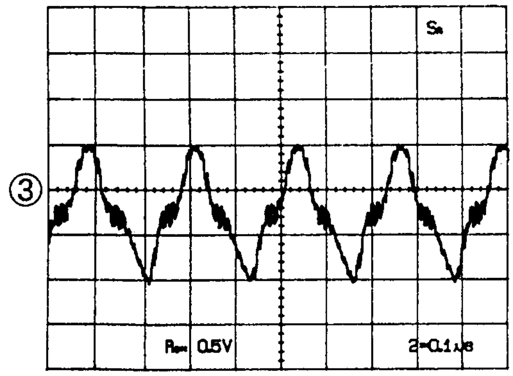
① IC301 Pin ⑭

② IC302 Pin ⑮



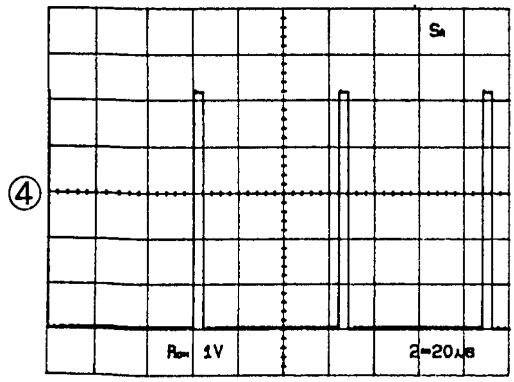
5ms/div.
1V/div.

③ IC301 Pin ⑩



0.1 μ s/div.
0.5V/div.

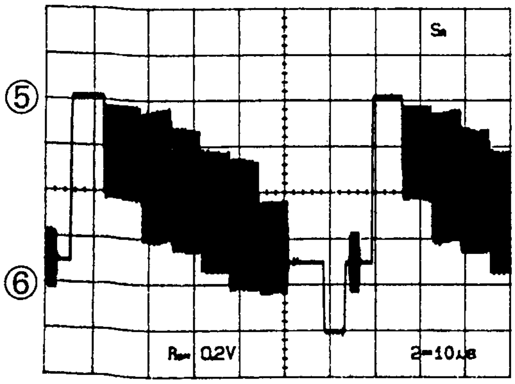
④ IC301 Pin ㉕



20 μ s/div.
1V/div.

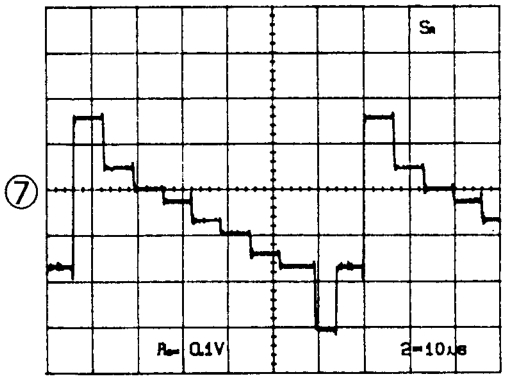
⑤ IC301 Pin ㉙

⑥ IC301 Pin ㉛



10 μ s/div.
0.2V/div.

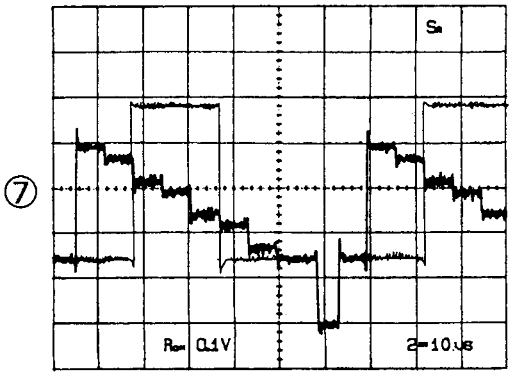
⑦ IC301 Pin ㊳



10 μ s/div.
0.1V/div.

MODE : PB

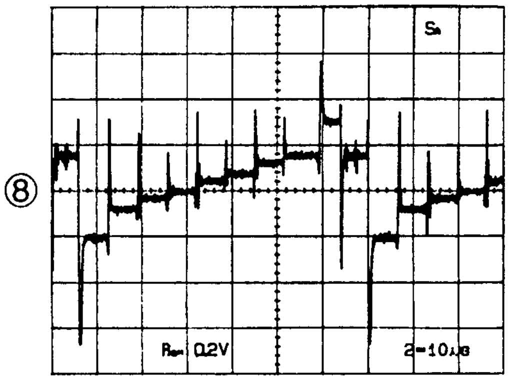
⑦ IC301 Pin ㊳



10μ s/div.
0.1V/div.

MODE : REC

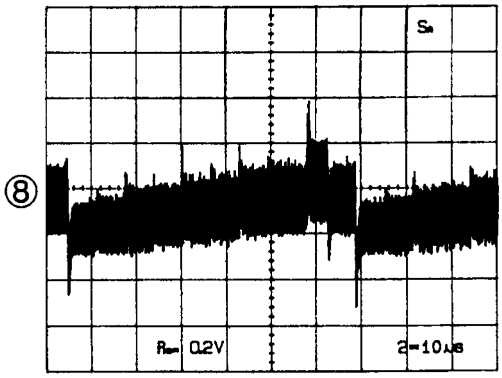
⑧ IC301 Pin ㊽



10μ s/div.
0.2V/div.

MODE : PB

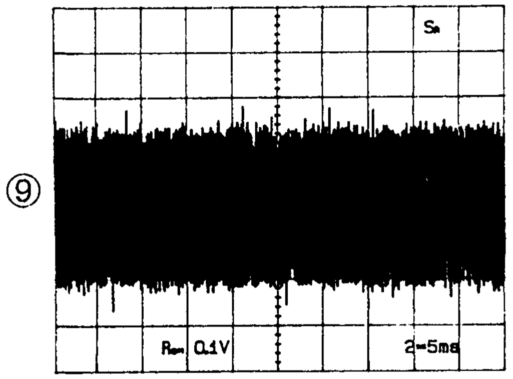
⑧ IC301 Pin ㊽



10μ s/div.
0.2V/div.

MODE : REC

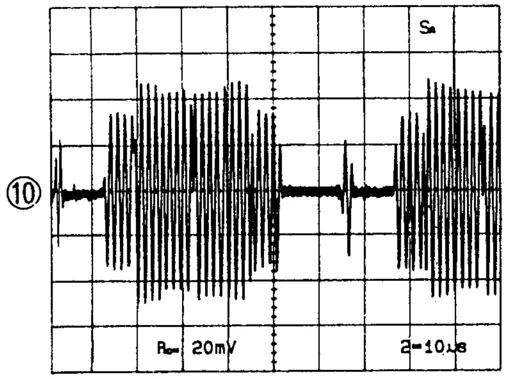
⑨ Q305 Emitter



5ms/div.
0.1V/div.

MODE : SP

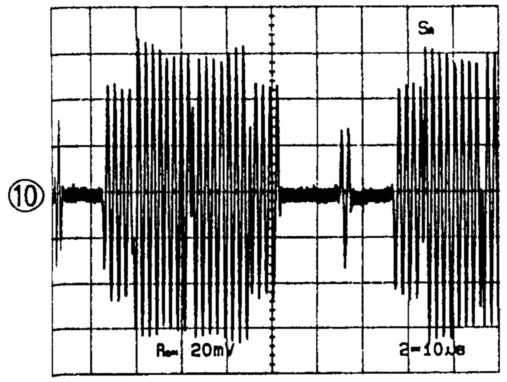
⑩ Q303 Emitter



10 µ s/div.
20mV/div.

MODE : LP

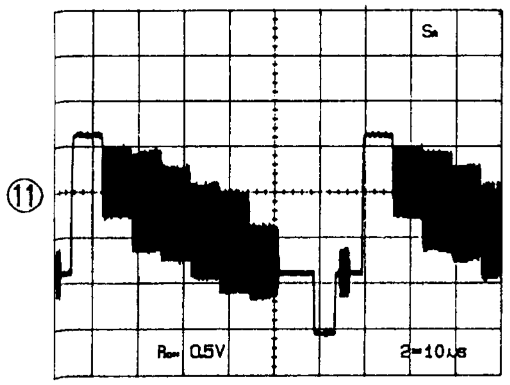
⑩ Q303 Emitter



10 µ s/div.
20mV/div.

MODE : LP

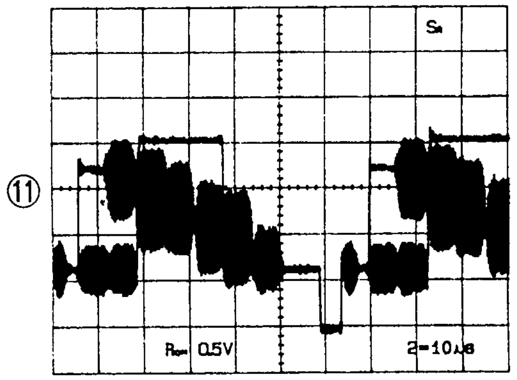
⑪ Q339 Emitter



10 µ s/div.
0.5V/div.

MODE : PB

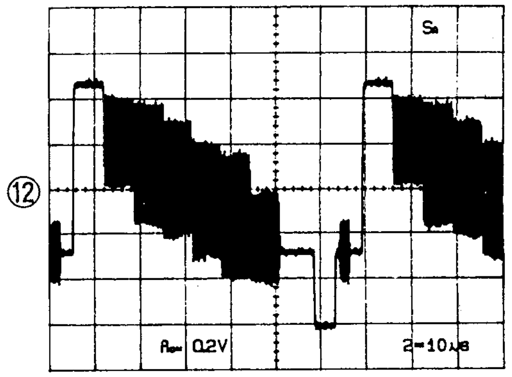
⑪ Q339 Emitter



10 µ s/div.
0.5V/div.

MODE : LP

⑫ Q340 Emitter

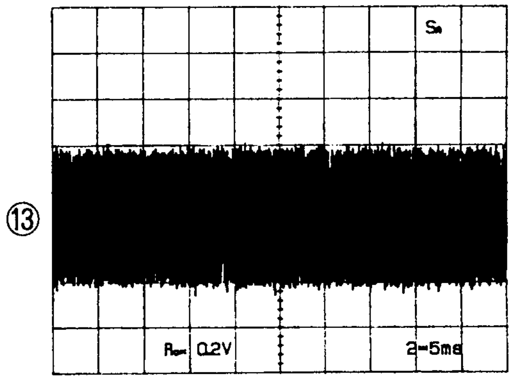


10 µ s/div.
0.2V/div.

MODE : PB

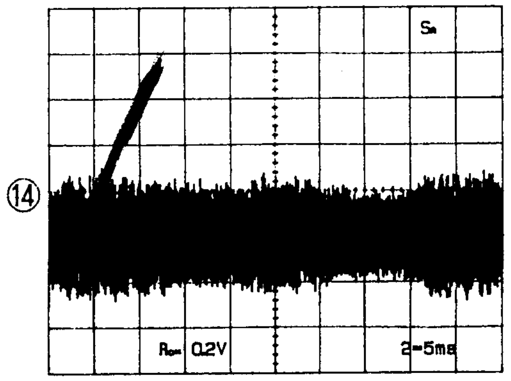
TEST TAPE : TTV – P1

⑬ Q317 Emitter



5ms/div.
0.2V/div.

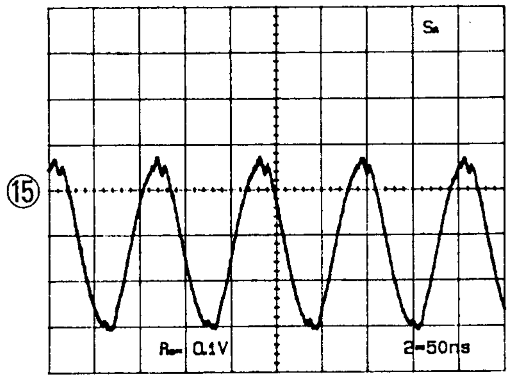
⑭ Q310 Emitter



5ms/div.
0.2V/div.

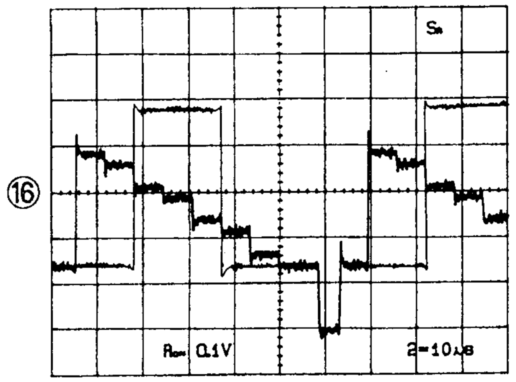
MODE : PB

⑮ IC302 Pin ⑪



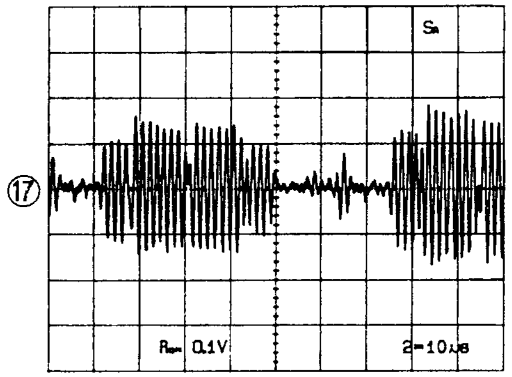
50ns/div.
0.1V/div.

⑯ IC301 Pin ㉟



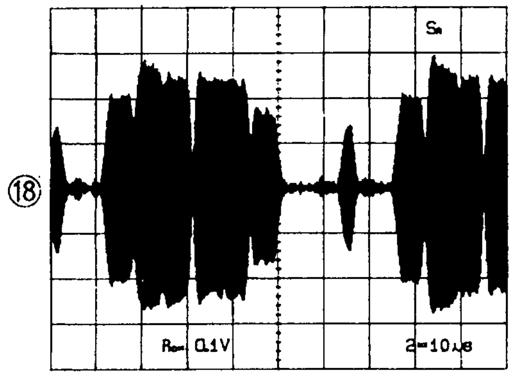
10 µ s/div.
0.1V/div.

⑰ IC301 Pin (56)



10 µ s/div.
0.1V/div.

⑱ IC301 Pin ⑲

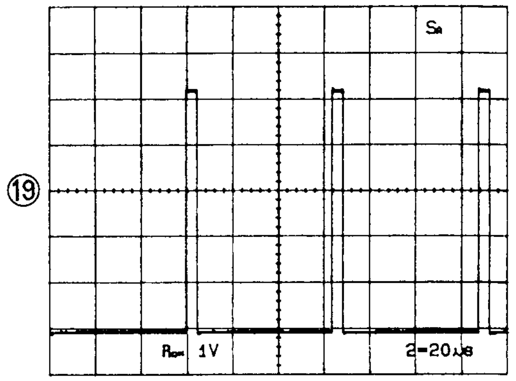


10 µ s/div.
0.1V/div.

OSD

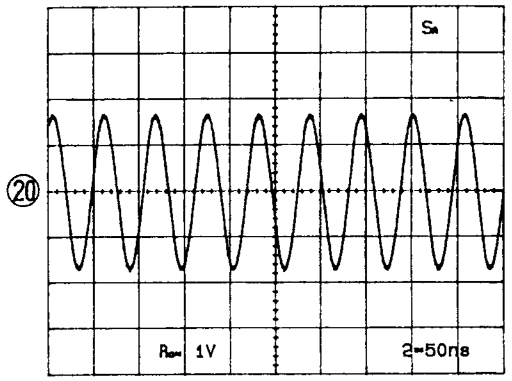
INPUT : COLOR BAR

⑲ IC303 Pin ④



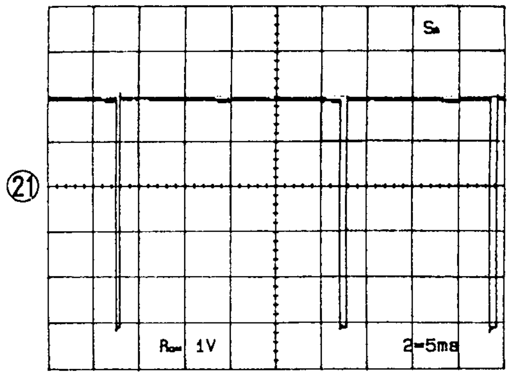
20 µ s/div.
1V/div.

⑳ IC303 Pin ⑥



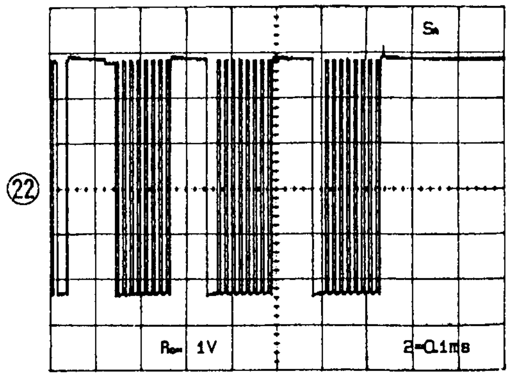
50ns/div.
1V/div.

㉑ IC303 Pin ⑧



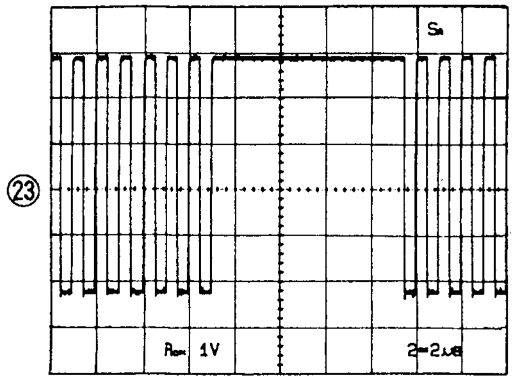
5ms/div.
1V/div.

㉒ IC303 Pin ⑨



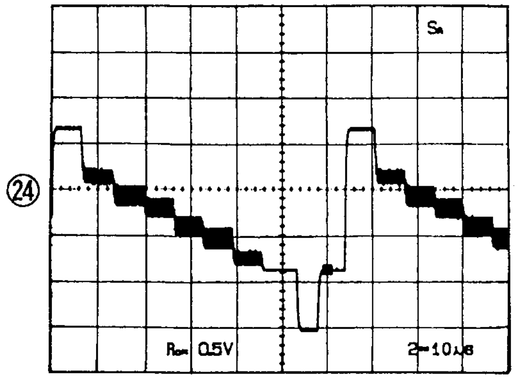
0.1ms/div.
1V/div.

㉓ IC303 Pin ⑩



2 μ s/div.
1V/div.

㉔ IC303 Pin ⑳

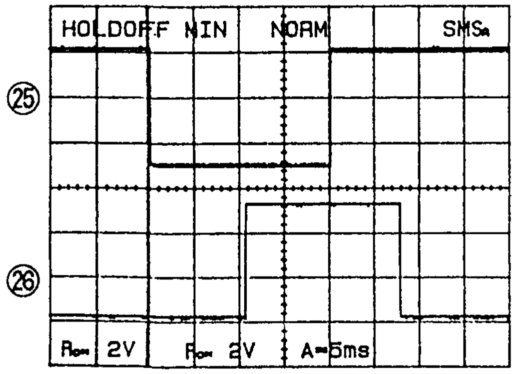


10 μ s/div.
0.5V/div.

(SS SECTION)

MODE : PB

TEST TAPE : TTV - P1
㉕ IC101 Pin (94) (HSW - V)
㉖ IC101 Pin ㉗ (CHECK : SERVICE MODE1/PUSH MENU/SELECT "CTLP")

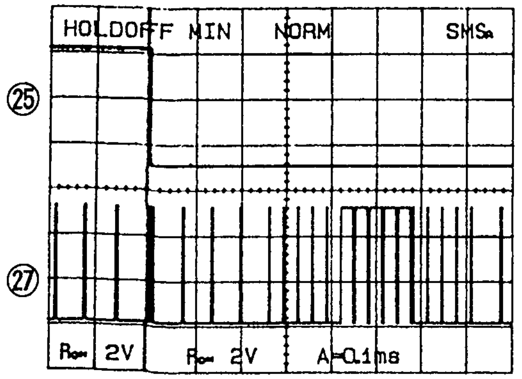


5ms/div.
2V/div.

5ms/div.
2V/div.

MODE : PB

TEST TAPE : TTV - P1
㉕ IC101 Pin (94) (HSW - V)
㉗ IC101 Pin (82) (C SYNC)

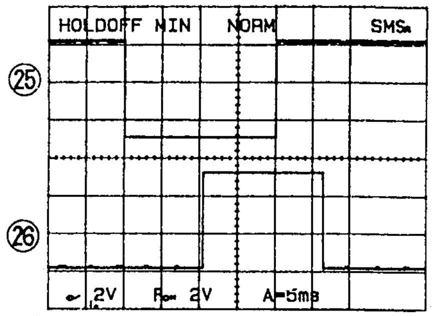


0.1ms/div.
2V/div.

0.1ms/div.
2V/div.

MODE : REC, SP INPUT : PAL

TEST TAPE : T - 120
㉕ IC101 Pin (94) (HSW - V)
㉖ IC101 Pin ㉗ (CHECK : SERVICE MODE1/PUSH MENU/SELECT "CTLP")

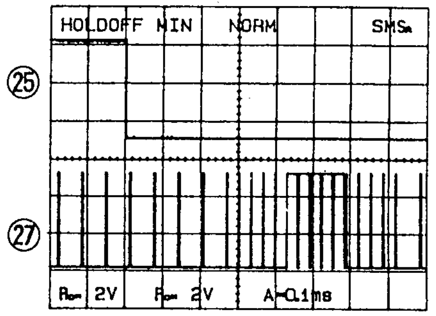


5ms/div.
2V/div.

5ms/div.
2V/div.

MODE : REC, SP INPUT : PAL

TEST TAPE : T - 120
㉕ IC101 Pin (94) (HSW - V)
㉗ IC101 Pin (82) (C SYNC)

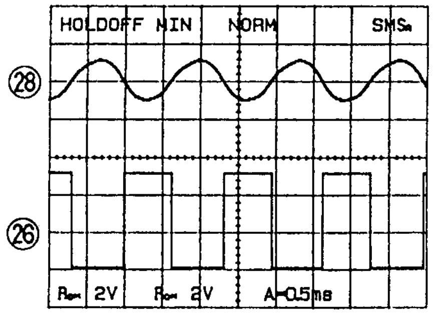


0.1ms/div.
2V/div.

0.1ms/div.
2V/div.

MODE : PB

TEST TAPE : TTV - P1
㉘ CN101 Pin ⑭ (CAP FG)
㉖ IC101 Pin ㉗ (CHECK : SERVICE MODE1/PUSH MENU/SELECT "CFG")

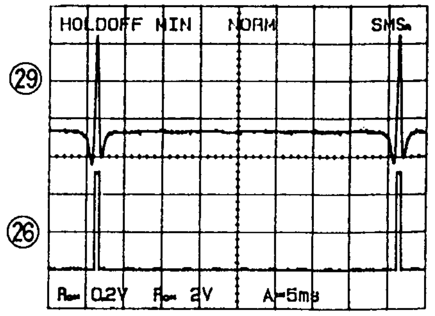


0.5ms/div.
2V/div.

0.5ms/div.
2V/div.

MODE : PB

TEST TAPE : TTV - P1
㉙ CN101 Pin ㉕ (DRUM PG)
㉖ IC101 Pin ㉗ (DRUM PG : SERVICE MODE1 / PUSH MENU/SELECT "DPG")

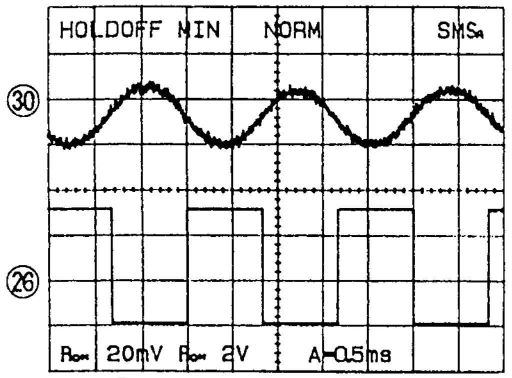


5ms/div.
0.2V/div.

5ms/div.
2V/div.

MODE : PB

TEST TAPE : TTV - P1
㉚ CN101 Pin ㉓ (DRUM FG)
㉖ IC101 Pin ㉗ (DRUM FG : SERVICE MODE1 / PUSH MENU/SELECT "DFG")

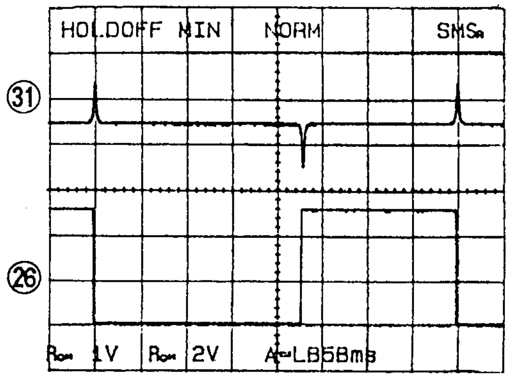


0.5ms/div.
20mV/div.

0.5ms/div.
2V/div.

MODE : P1

TEST TAPE : TTV - P1
㉛ IC101 Pin (71) (PB CTL)
㉖ IC101 Pin ㉗ (CHECK : SERVICE MODE1/PUSH MENU/SELECT "CTLP")

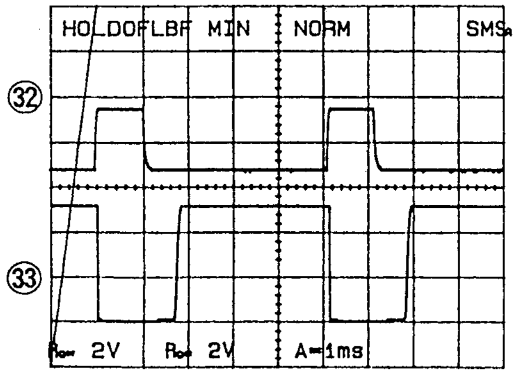


LB5Bms/div.
1V/div.

LB5Bms/div.
2V/div.

MODE : EE

㉜ Q104 BASE (TOP/END SENS LED)
㉝ IC101 Pin ⑮ (TOP-SENS)

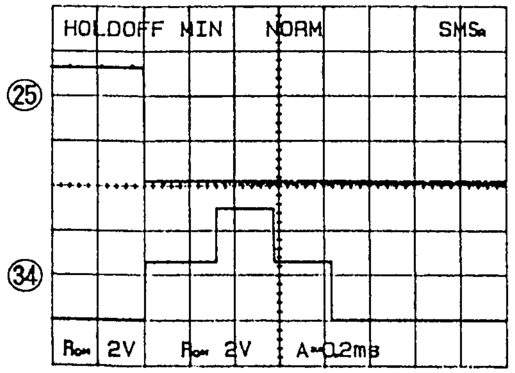


1ms/div.
2V/div.

1ms/div.
2V/div.

MODE : PAUSE

TEST TAPE : TTV - P1
㉕ IC101 Pin (94) (HSW - V)
㉞ IC101 Pin (98) (JOG VD)

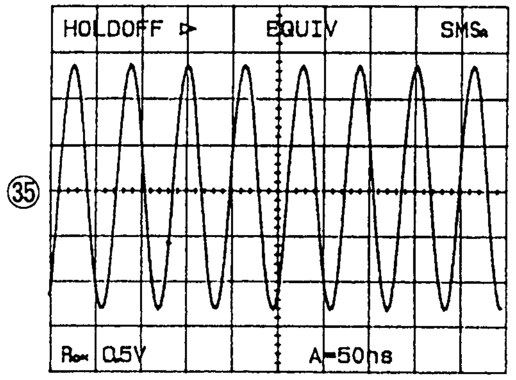


0.2ms/div.
2V/div.

0.2ms/div.
2V/div.

MODE : EE

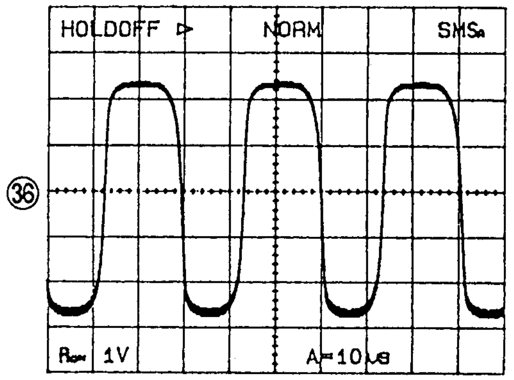
㉟ CHECK LAND 16M, IC101 Pin ㊷



50ns/div.
0.5V/div.

MODE : EE

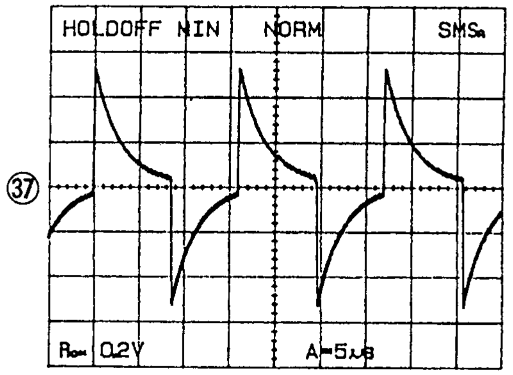
㊱ CHECK LAND 32K, IC101 Pin (87)



10 μ s/div.
1V/div.

MODE : PB

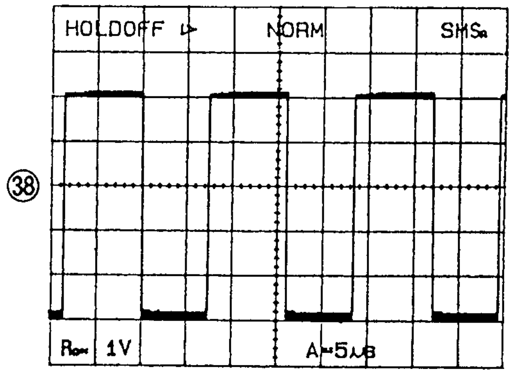
TEST TAPE : TTV - P1
㊲ IC101 Pin (79) (DRUM D/A)



5μ s/div.
0.2V/div.

MODE : PB

TEST TAPE : TTV - P1
㊳ IC101 Pin (78) (CAP PWM)

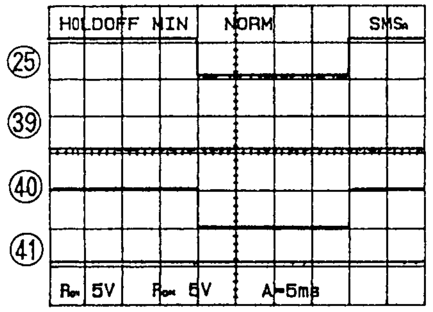


5μ s/div.
1V/div.

MODE : PB

TEST TAPE : TTV-P1

㉕ IC101 Pin (94) (HSW – V)
㊴ IC101 Pin (92) (H SEL)
㊵ IC101 Pin (93) (C ROT)
㊶ IC101 Pin ㉒ (DENV)

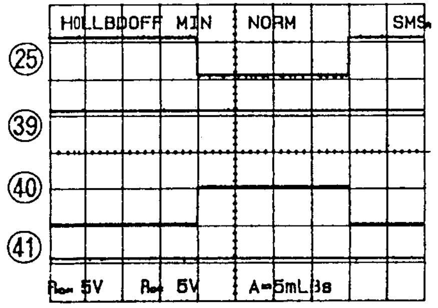


5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.

MODE : PB

TEST TAPE : TTV-P1L

㉕ IC101 Pin (94) (HSW – V)
㊴ IC101 Pin (92) (H SEL)
㊵ IC101 Pin (93) (C ROT)
㊶ IC101 Pin ㉒ (DENV)

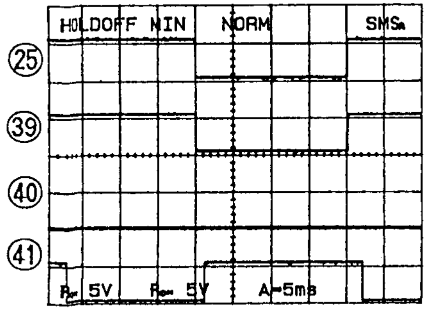


5mLBs/div.
5V/div.
5mLBs/div.
5V/div.
5mLBs/div.
5V/div.
5mLBs/div.
5V/div.

MODE : PAUSE

TEST TAPE : TTV-P1

㉕ IC101 Pin (94) (HSW – V)
㊴ IC101 Pin (92) (H SEL)
㊵ IC101 Pin (93) (C ROT)
㊶ IC101 Pin ㉒ (DENV)

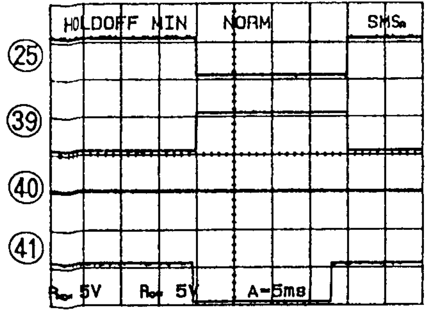


5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.

MODE : PAUSE

TEST TAPE : TTV-P1L

㉕ IC101 Pin (94) (HSW – V)
㊴ IC101 Pin (92) (H SEL)
㊵ IC101 Pin (93) (C ROT)
㊶ IC101 Pin ㉒ (DENV)

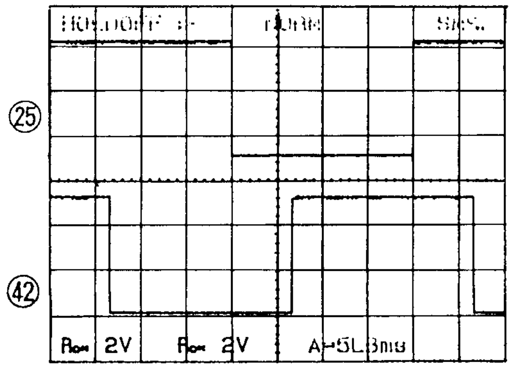


5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.
5ms/div.
5V/div.

MODE : PB

TEST TAPE : TTV – P7

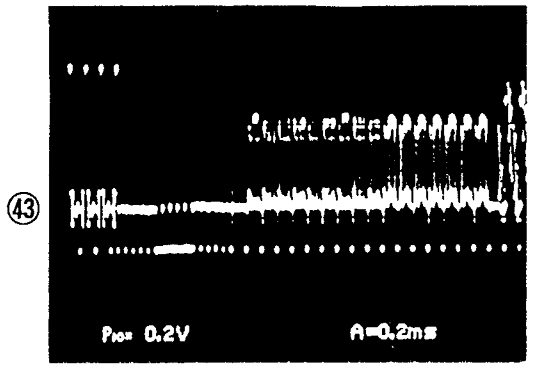
㉕ IC101 Pin (94) (HSW – V)
㊷ IC101 Pin (95) (HSW – A)



5LBms/div.
2V/div.
5LBms/div.
2V/div.

MODE : RF (PDC SIGNAL) <HV-FX3500K/FX2500K>

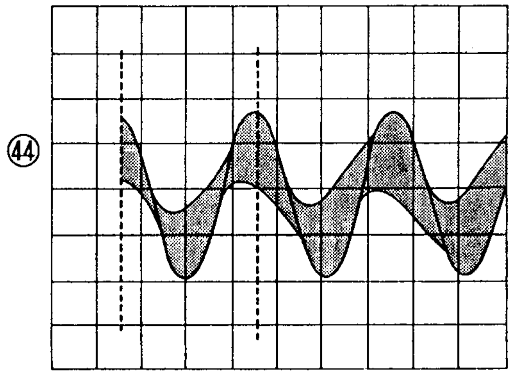
㊸ IC106 Pin ⑬ (CBVS)



0.2ms/div.
0.2V/div.

(TUNER SECTION) <HV-FX3500AE>

㊹ CN802 Pin ① (SIF)



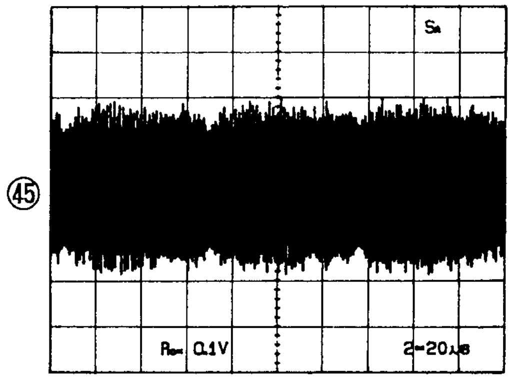
50ns/div.
0.1V/div.

(HEAD AMP SECTION)

MODE : PB

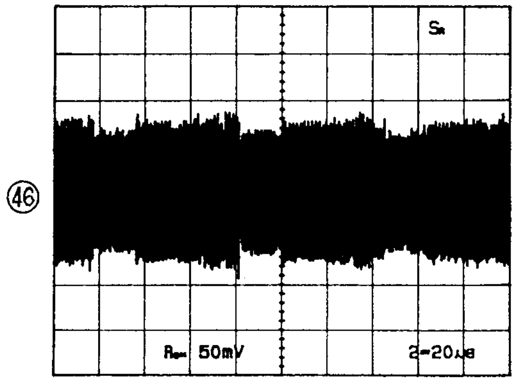
TEST TAPE : TTV – P1 PLAY BACK

㊺ Q508 Emitter



20 μ s/div.
0.1V/div.

㊻ Q505 Emitter

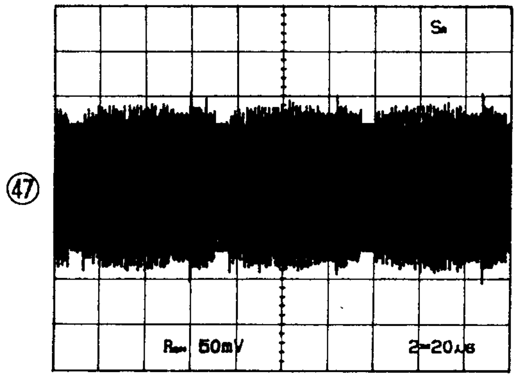


20 μ s/div.
50mV/div.

MODE : REC

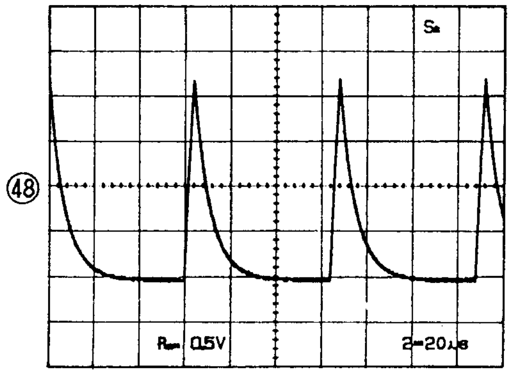
INPUT : COLOR BAR

㊼ IC501 Pin ⑭



20 μ s/div.
50mV/div.

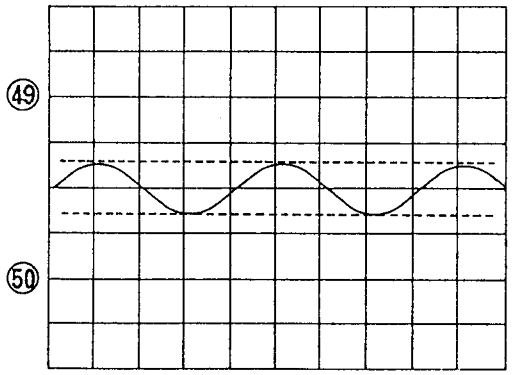
㊽ IC501 Pin ⑰



20 μ s/div.
0.5V/div.

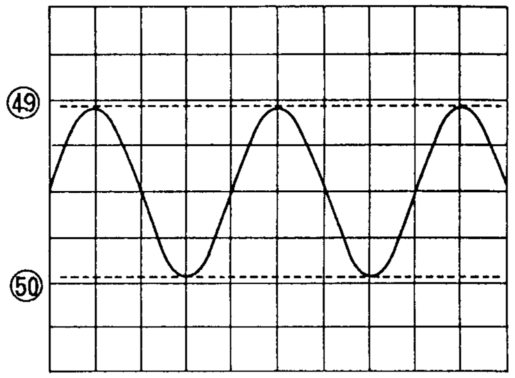
CANAL SECTION

㊾ 21-OUT-L (NORMAL, GAIN ≒ 0dB)
㊿ 21-OUT-R



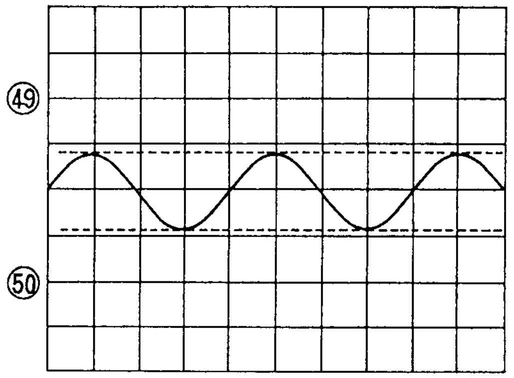
5ms/div.
2V/div.

㊾ 21-OUT-L (DINAMIC MODE, GAIN ≒ 13dB)
㊿ 21-OUT-R



5ms/div.
2V/div.

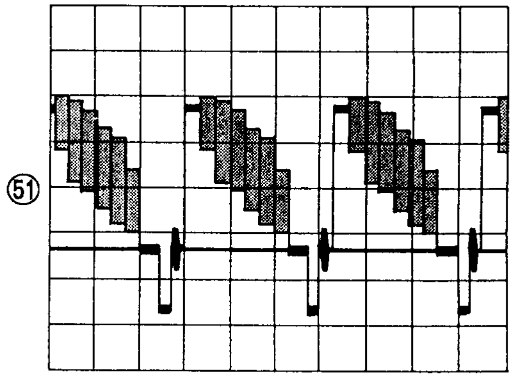
㊾ 21-OUT-L (MIDNIGHT MODE, GAIN ≒ 55dB)
㊿ 21-OUT-R



5ms/div.
2V/div.

MODE : TU1

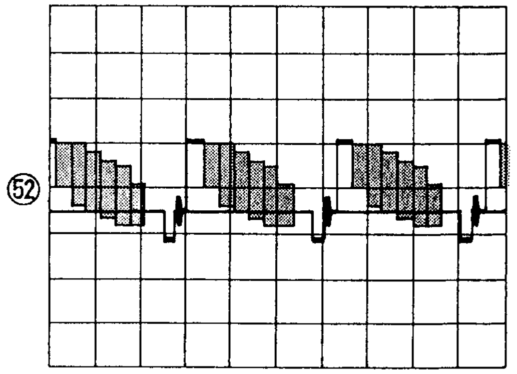
(51) CN1 Pin ① (V OUT)



20 μ s/div.
0.5V/div.

MODE : STANDBY, P ON

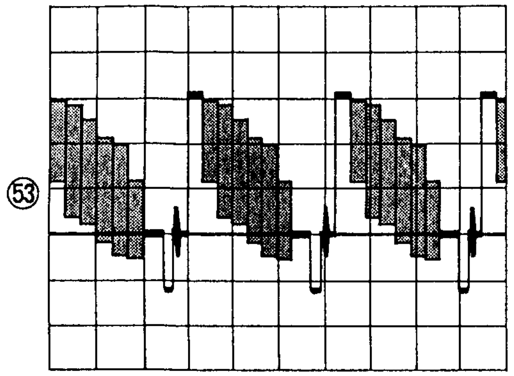
(52) CN2 Pin ⑳ (VIDEO IN)



20 μ s/div.
0.5V/div.

MODE : OPEN (NO CONNECT)

(53) CN3 Pin ⑲ (VIDEO OUT)



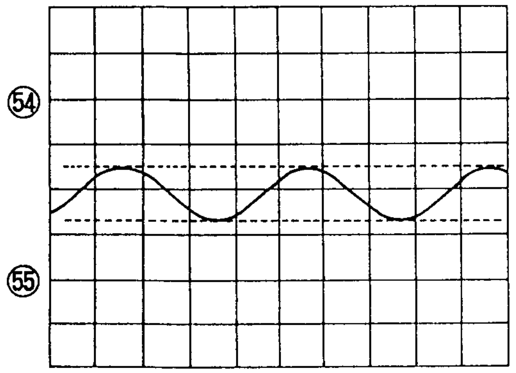
20 μ s/div.
0.5V/div.

< HV-FX3500K, AE >

MODE : PB (AUDIO 50Hz, AUDIO LEVEL −20dBm

(54) HiFi L (50Hz −20dBm)

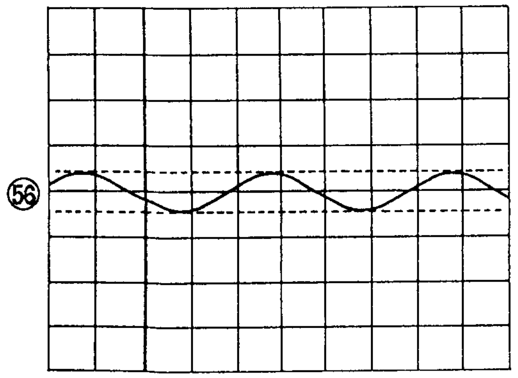
(55) HiFi R



5ms/div.
2V/div.

< HV-FX3500K, AE >

(56) RF A (MODE NORMAL)



5ms/div.
2V/div.

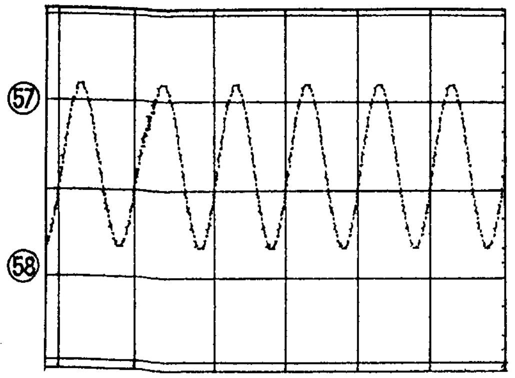
(HiFi SECTION)

MODE : STEREO

TEST TAPE : P7 PLAY BACK

(57) IC701 Pin ㉑

(58) IC701 Pin ㉒

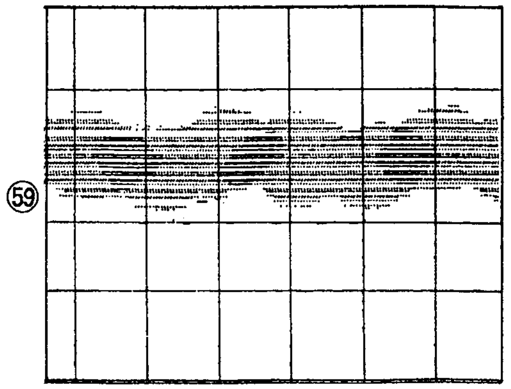


1ms/div.
500mV/div.

1ms/div.
500mV/div.

MODE : REC SP (NO SIGNAL)

(59) IC701 Pin (56)

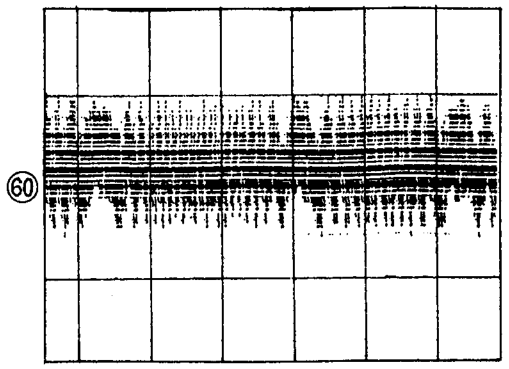


500 μ s/div.
500mV/div.

MODE : PB

TEST TAPE : P7

(60) IC701 Pin (57)

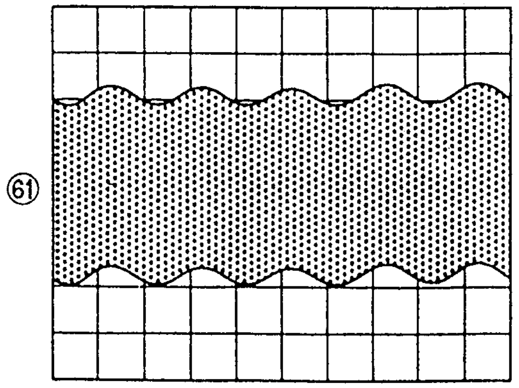


200 μ s/div.
500mV/div.

MODE : REC SP

INPUT : 1kHz/−8dBs

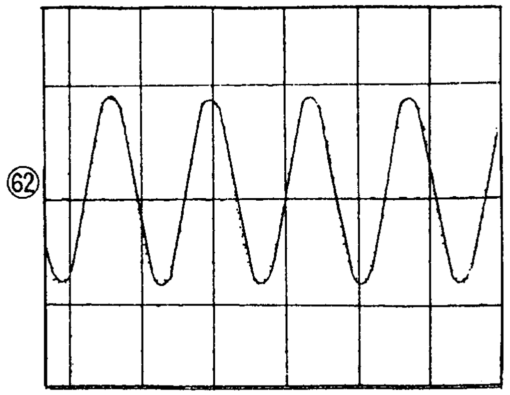
(61) CN701 Pin ②



0.5ms/div.
20mV/div.

MODE : REC SP (NO SIGNAL)

(62) BT702 Pin ②

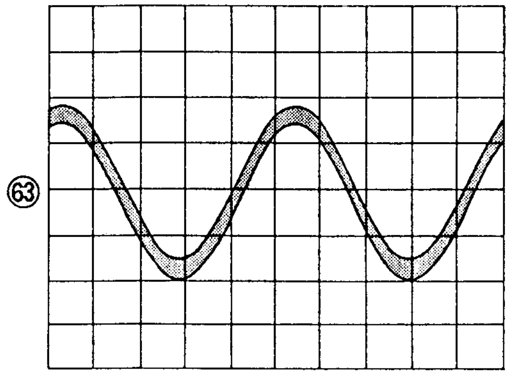


10 μ s/div.
20V/div.

(NICAM SECTION)

< HV-FX3500K/FX2500K >

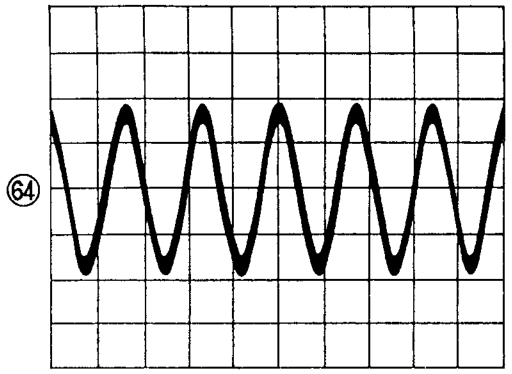
(63) IC651 Pin ⑧ (OUTPUT Rch)



0.2ms/div.
0.2V/div.

< HV-FX3500K/FX2500K >

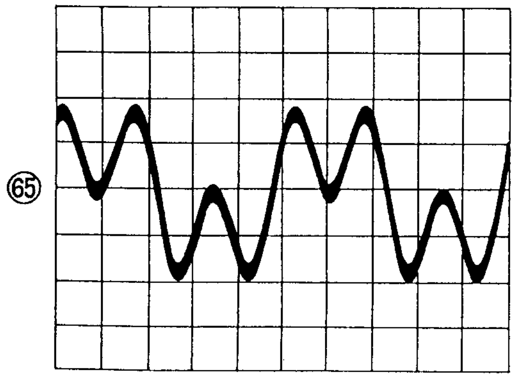
(64) IC651 Pin ⑮ (OUTPUT Lch, 3kHz)



0.2ms/div.
0.2V/div.

< HV-FX3500K/FX2500K >

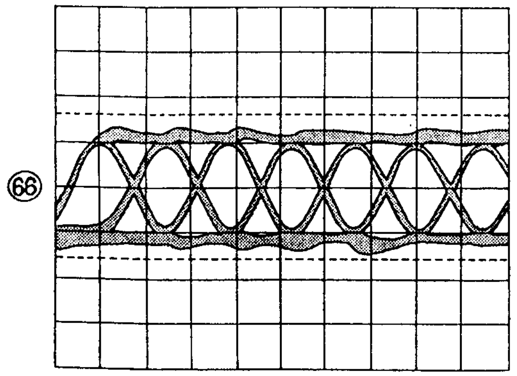
(65) IC651 Pin ⑯ (From TUNER PACK MONORAL SIGNAL, Rch : 1kHz, Lch, 3kHz)



0.2ms/div.
0.2V/div.

< HV-FX3500K/FX2500K >

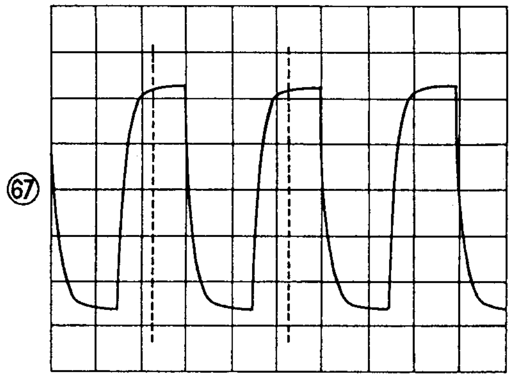
(66) IC651 Pin ㉒



2 μ s/div.
0.5V/div.

< HV-FX3500K/FX2500K >

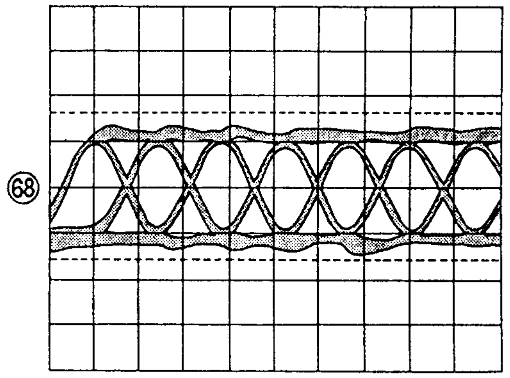
(67) IC651 Pin ㉕ (I PAL)



50ns/div.
1V/div.

< HV-FX3500K/FX2500K >

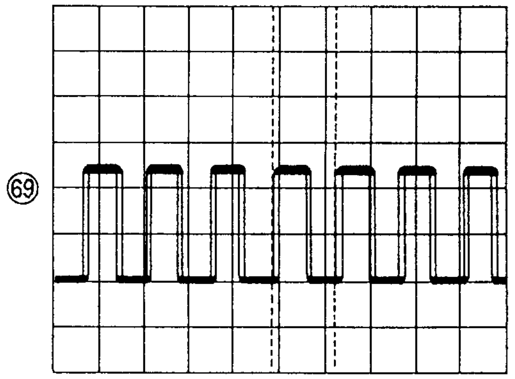
(68) IC651 Pin ㉛



2 μ s/div.
0.5V/div.

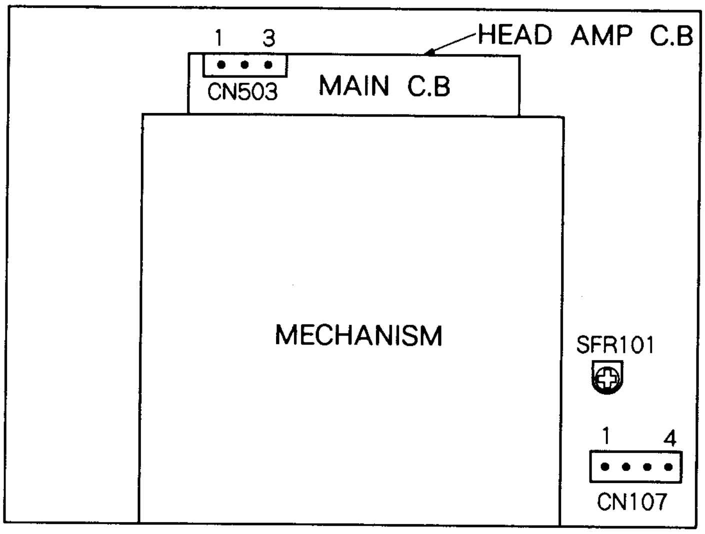
< HV-FX3500K/FX2500K >

(69) IC651 Pin ㊺



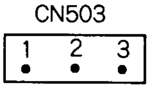
1 μ s/div.
2V/div.

ADJUSTMENT

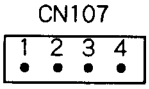


1 3
HEAD AMP C.B
CN503
MAIN C.B
MECHANISM
SFR101
1 4
CN107

Front View



PIN NO.
1 PB RF
2 GND
3 SWP



PIN NO.
1 HSW V
2 C SYNC
3 TRRST
4 SS GND

1. Switching Position Adjustment

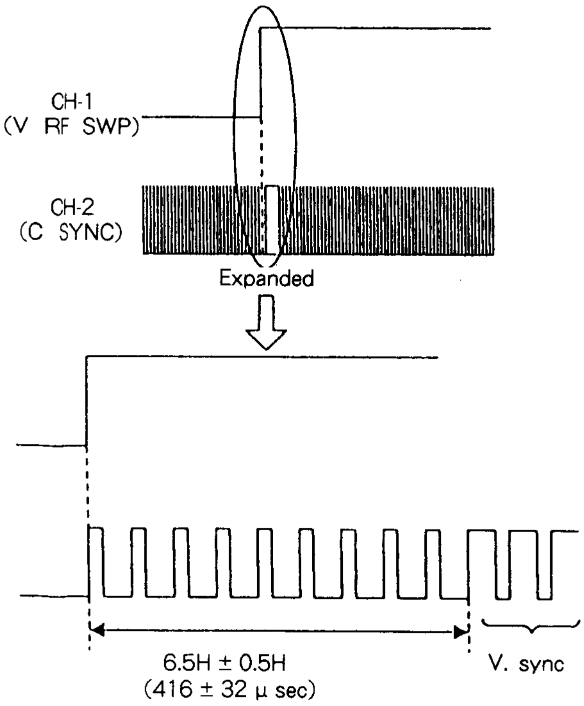
MODE : PB CH-2 (2) or TTV-P1

Osciloscope : CH-1 : CN107 (C SYNC)
CH-2 : CN107 (HSW V)

Adjustment Method

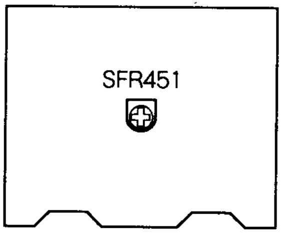
(1) Set the tracking to the center.
※Short TRRST of CN107 to GND.

(2) Adjust SFR101 so the observed waveforms are as shown in the diagram below.



CH-1
(V RF SWP)
CH-2
(C SYNC)
Expanded
6.5H ± 0.5H
(416 ± 32 μ sec)
V. sync

(3) Release the short-circuit between TRRST and GND.



ZWEITON C.B

2. Channel Separation Adjustment

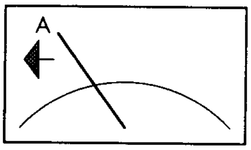
MODE : EE

Signal generator : PAL color bar
fp : 471.25 MHz (UHF)
Level : 60 dB μ
System : B/G
PDC data : off

[ZWEITON sound]
1ch : No signal
2ch : 1 kHz

Adjutment Method :

(1) Audio output (Lch)
Audio monitor : STEREO
22 k Ω terminated



(PM5418 TDS1) TV
Signal generator voltmeter

(2) Adjust SFR451 so that the voltmeter reads − 40 dBm.

SERVICE MODE

(1) Starting the Service Mode

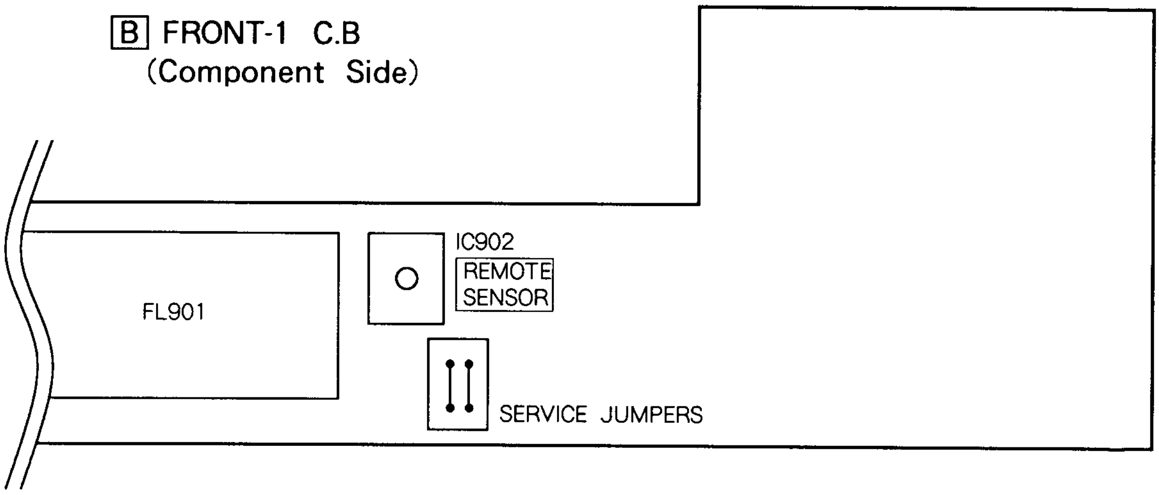
Short the service jumpers on the front C. B. to start the service mode. Each time it is shorted, the mode changes as follows.

Service Mode 1→2→3→4→5→Normal Mode (K Model)
Service Mode 1→2→3→Normal Mode (AE Model)
Causion : The above method cannot be used unless communications between the IC on the front C.B. and the microprocessor are normal.

(2) Releasing the Service Mode

If the mode switching operation is performed after starting, the normal mode is enterd after mode 5 or mode 3 (the service mode is released). The service mode is also released when the power cord is unplugged from the AC outlet and is plugged in again.

B FRONT-1 C.B
(Component Side)


FL901
IC902
REMOTE SENSOR
SERVICE JUMPERS

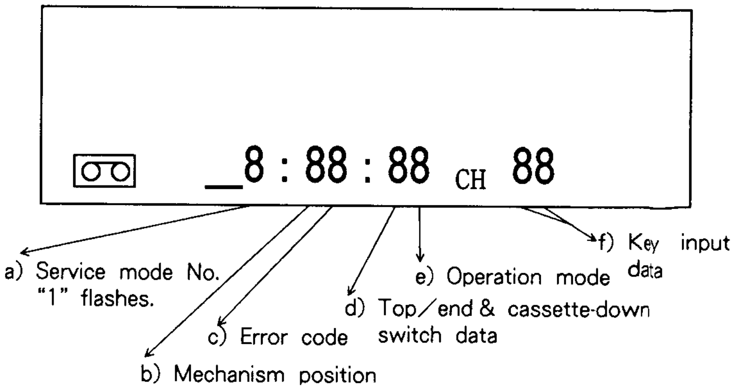
(3) Overview

①Service Mode 1

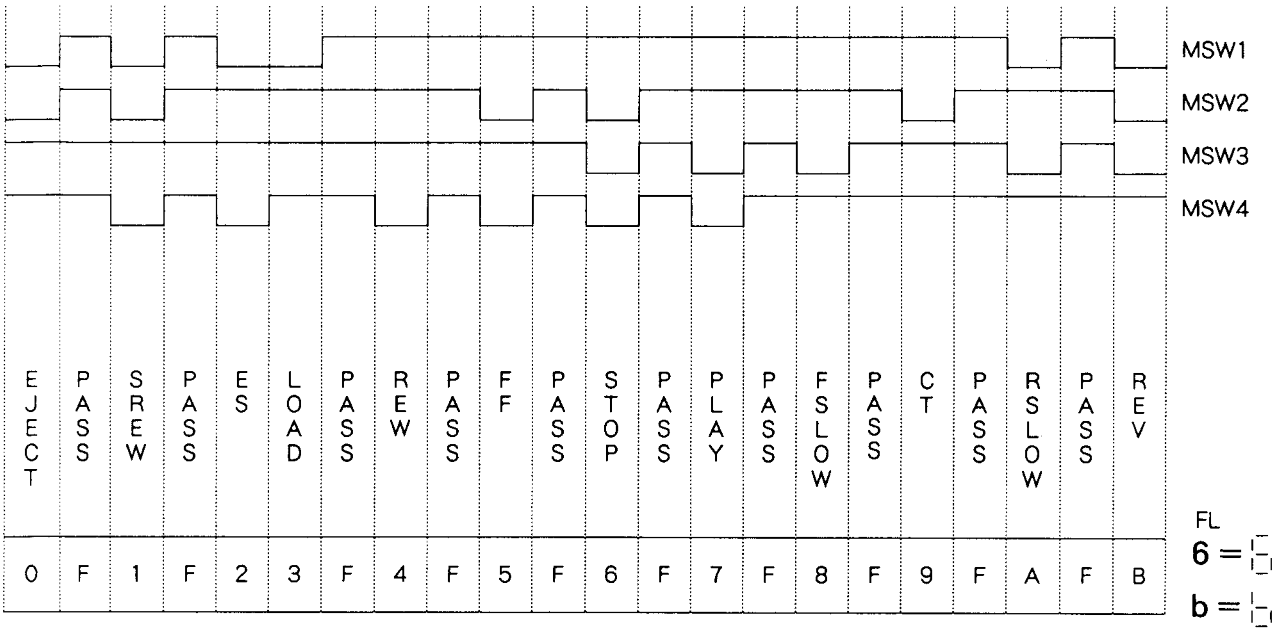
The following data is displayed in the FL display (FL901).

a) Service mode No.
b) Mechanism position
c) Error code
d) Top/end sensor & CST SW data
e) Operation mode
f) Key/remote control input data

FL901


_8 : 88 : 88 CH 88
a) Service mode No. "1" flashes.
b) Mechanism position
c) Error code
d) Top/end & cassette-down switch data
e) Operation mode
f) Key input data

b) Mechnism position



c) Error code

Error code	Details	State
0	Normal	
1	Cassette loading error	Id CST SW : L→H cannot be detected within 6 seconds after cassette-in is detected.
2	Cassette eject error	If CST SW : H→L cannot be detected within 3 seconds after eject is started or if cassette-out cannot be detected (top sensor) within 6 seconds after CST SW
3	Sledding error	If transfer to the subsequent operation position cannot be done within 6 seconds after sledding is started.
4	Unsledding error	If transfer to the subsequent operating position cannot be done within 6 seconds after unsledding is started.
5	Leader processing error	If the processing of the leaders at the tape top/end is not finished within 6 seconds.
6	T reel sensor	If no T reel pulse is detected for more than 8 seconds when the tape is running.
7	S reel sensor	If no S reel pulse is detected for more than 8 seconds when the tape is running.
8	Drum error	If no DFG pulse is detected for more than 5 seconds when the tape is running.
9	Protect error	If PRT-L is detected for more than 1 second when the power is turned on.
A	Mechanism state error	Error caused by the mechanism position switch (Normal : 1→F→3)
B	Capstan error	If no CFG pulse is detected for more than 2 seconds when the capstan is rotating. However, it is ignored during eject.

d) Top/end sensor & CST SW data

bit	Details of data	
1	End sensor	Bit = 1 when leader is detected (ON)
2	Top sensor	Bit = 1 when sensor is detected (ON)
3	CST SW	Bit = 1 when SW (L) is detected

Example : "6" is displayed during eject
Bit 3 2 1
1 1 0 = 6
End sensor OFF
Top sensor ON
CST SW = L

e) Operation mode

0	Power on (with tape)
1	Power on (withot tape)
2	Stop (Drum rotating)
3	FF
4	REW
5	PLAY
6	CUE
7	REVIEW

8	Still/Slow
9	REC
A	REC PAUSE
b	Power off (without tape)
C	Power off (with tape)
d	Reverse play
E	Reverse slow/still

f) Key codes

00	POWER	10	---	20	0	30	THEATER
01	EJECT	11	---	21	1	31	MENU
02	STOP	12	ATR	22	2	32	NEXT ▶
03	FF	13	(+)	23	3	33	BACK ◀
04	REW	14	(−)	24	4	34	CLEAR
05	PLAY	15	< TRK. CENTER >	25	5	35	DISPLAY
06	REC	16	VIDEO PLUS	26	6	36	CH NO
07	PAUSE/STILL	17	---	27	7	37	CLOCK SET
08	JOG	18	D WLY	28	8	38	AUTO SET
09	V. FWD ≫	19	ADD. T	29	9	39	OK
0A	V.RVS ≪	1A	PDC	2A	CH UP ⊼	3A	CUR UP ▲
0B	OTPB	1B	---	2B	CH DOWN ⊻	3B	CUR DOWN ▼
0C	SP/LP	1C	AMON	2C	TV/VCR	3C	---
0D	C-RESET	1D	---	2D	INPUT	3D	---
0E	C-MEMO	1E	INDEX (+) ▶▶|	2E	GUIDE	3E	---
0F	---	1F	INDEX (−) |◀◀	2F	SERVICE	3F	---

Since the displayed codes are the intermediate codes when the microprocessor is operating, the numerals do not show the actual remote control codes. If the operations are different when the same keys are pressed, the displayed codes may be different.

Example) Shuttle ring on the VCR ; In STOP it is a transfer to FF/REW keys.

Since it is a special effects playback command during still/play, JOG (08) is displayed.

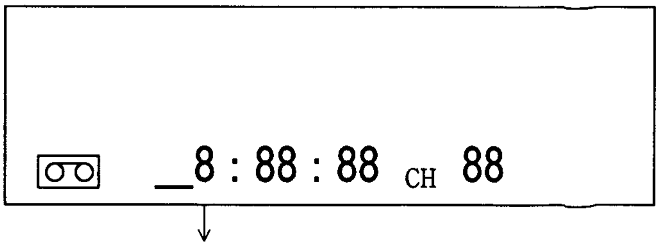
② Service Mode 2

The following data is ignored.

a) Top/end data (apart from when the cassette is being inserted and ejected)

b) Reel data

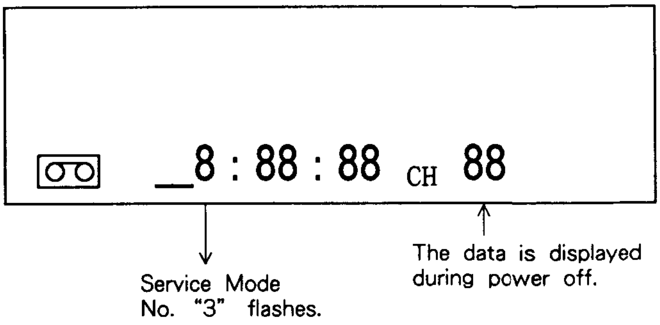
This mode is used when a summy tape is running.



Service Mode No. "2" flashes

③ Service Mode 3

The clock is advanced at 60 times the normal speed. When this mode is used to check timer recording, the data on secondsis ignored, so this mode should be left one minute before thetimer recording.


_8 : 88 : 88 CH 88
Service Mode No. "3" flashes.
The data is displayed during power off.

④ Service Mode 4

The PDC signal superimposed on the picture currently being received is displayed in this mode.

This mode is used to check the characteristics of the PDC signal which is currently being received.

If a PDC signal is included, a number is displayed, and if no PDC signal is present, the previous data is held or a bar is displayed.

```
PDC DATA

CN1    2F
PIL    25 SEP 18 : 30
PRF    0
LUF    0
LCI    0
```

Signal name	Description	Use
CN1	Country code, network code	Codes which identify the country from which a program is broadcast and the broadcast station.
PIL	Program identification label	Code which controls the time of program (day, month, hour, minute)
PRF	Record flag	Code which controls the recording start/end.
LUF	Update flag	Code which updates the data in the VCR when the schedule of recording is later across the date line.
LCI	Label channel	Code which identifies the programs when they are overlapped.

⑤ Service Mode 5

The UDT signal superimposed on the picture being currently received is displayed in this mode.

This mode is used to check the characteristics of the UDT signal which is currently being received.

```
UDT DATA

NIC    5FF6
MJD    E4・88・41
UTC    8 : 56 : 32
TOC    00
PWM    89AB
AGC    8B
```

Signal name	Description
NIC	Country identification code
MJD	Value obtained by processing Greenwich Mean Time using a microprocessor. As this is encoded, thetime cannot be found from it.
UTC	Time for which the signal is transmitted.
TOC	Time difference from the standard time
PWM	The approximate frequency of the tuned station can be found from this value.
AGC	The approximate signal strength of the station can be found from this value.

If a UDT signal is included in these signals, a number is displayed, and if no UDT signal is present, the previous data is held or a bar is displayed.

IC DESCRIPTION

IC, TDA9840

Pin No.	Pin Name	I/O	Description
1	SDA	I/O	I^2C-bus data input/output
2	CAGC	–	AGC capacitor of pilot frequency amplifier
3	CLP	–	Identification low-pass capacitor
4	CDCL	–	DC loop capacitor
5	Vipil	I	Pilot frequency input voltage
6	Cref	–	Capacitor of reference voltage (1/2Vp)
7	Vi1	I	AF input signal Vi1 (from 1st sound carrier)
8	Vi2	I	AF input signal Vi2 (from 2nd sound carrier)
9	Vi3	I	AF input signal Vi3 (NICAM or AM sound (standard L))
10	Vi4	I	AF input signal Vi4(NICAM)
11	Vo4	O	AF output signal Vo4 (SCART)
12	Vo3	O	AF output signal Vo3 (SCART)
13	Vo2	O	AF output signal Vo2 (main)
14	Vo1	O	AF output signal Vo1(main)
15	CD1	–	50 μ s de-emphasis capacitor of AF Channel 1
16	GND	–	Ground (0V)
17	CD2	–	50 μ s de-emphasis capacitor of AF Channel 2
18	Vp	I	Supply voltage (+5 to +8V)
19	XTAL	I	10 MHz crystal input
20	SCL	I	I^2C-bus clock input

IC, LC74763M

Pin No.	Pin Name	I/O	Description
1	VSS	–	Connected to ground.
2	Xtal IN1	I	For the connection of a crystal oscillator and capacitors composing the crystal oscillator circuit which generates internal sync signals. The crystal oscillator circuit is selected by command.
3	Xtal OUT1	O	
4	HSTYCOUT	O	Outputs a horizontal sync signal (AFC). The output polarity can be selected. (Metal option) Alternatively, a general-purpose port output (switched by command).
5	Xtal IN2	I	For the connection of a crystal oscillator and capacitors composing the crystal oscillator circuit which generates internal sync signals.
6	XtalOUT2	O	
7	VSYNCOUT	O	Outputs a vertical sync signal. The output polarity can be selected. (Metal option) Alternatively, a general-purpose port output (switched by command).
8	$\overline{\text{CS}}$	I	Input to enable serial data input. "L" input enables serial data input (hysteresis input). A pull-up resistor is incorporated. (Metal option)
9	SIN	I	Serial data input (hysteresis input). A pull-up resistor is incorporated. (Metal option)
10	SCLK	I	A clock signal is input to receive the serial data (hysteresis input). A pull-up resistor is incorporated. (Metal option)
11	SECAM	I	The input controls the SECAM mode switching. "L" : Modes other than SECAM, "H" : SECAM mode. General-purpose port output or internal V output (switched by command)
12	$\overline{\text{525}}$/625	I/O	The input switches between 525 and 625 scanning lines. "L" : 525 lines, "H" : 625 lines. General-purpose port output or character data output (switched by command).
13	$\overline{\text{NTSC}}$/PAL	I/O	The input switches the color system between NTSC and PAL. "L " : NTSC, "H" : PAL. General-purpose port output or character data output (switched by command).
14	$\overline{\text{3.58}}$/4.43	I/O	The input switches FSC between 3.58 MHz and 4.43 MHz. "L" : 3.58 MHz, "H" : 4.43 MHz. General-purpose port output or halftone output (switched by command).
15	$\overline{\text{RST}}$	I	System reset input (active "L"). (Hysteresis input) A pull-up resistor is incorporated. (Metal option)
16	C VOUT	O	Composite video signal output
17	VDD2	–	Power supply which creates the level of the composite video signal.
18	CVIN	I	Composite video signal input
19	CVCR	I	SECAM chroma signal input
20	SYNCIN	I	Video signal input of the internal sync separator
21	SEPC	O	Bias output of the internal sync separator
22	VSS	–	Ground
23	P DOUT	O	AFC control voltage input
24	AMPIN	I	For the connection of a filter of the AFC circuit
25	AMPOUT	O	
26	FC	I	AFC control voltage input
27	VCOIN	I	For the connection of a coil and capacitors which compose an LC oscillator for the VCO.
28	VCOOUT	O	
29	SYNCDET	O	EX-NOR output of horizontal sync signal (APC) and C. SYNC (sync separator). The output polarity can be selected. (Metal option) Alternatively, general-purpose port output (switched by command).
30	VDD1	–	Power supply (+5 V of digital circuits)

IC, CXP88748

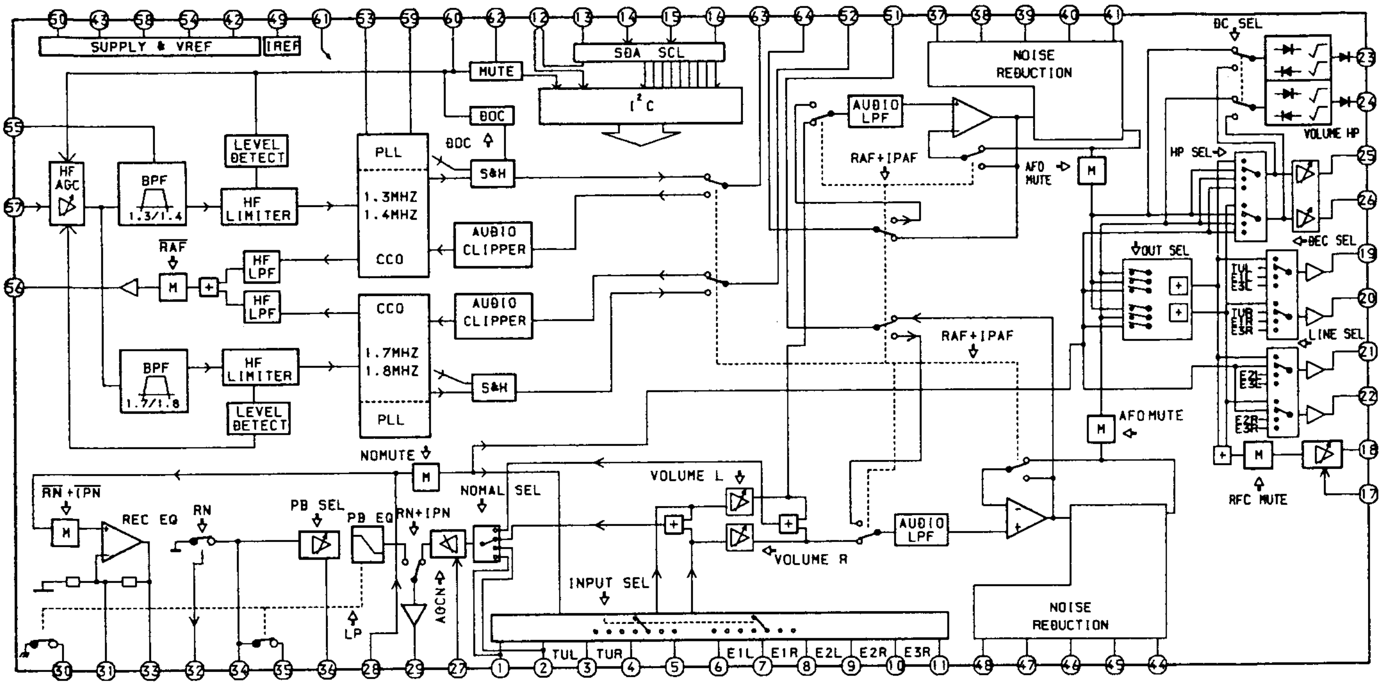
<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>$\overline{\text{SP}}$/LP</td><td>O</td><td>Video/audio switching signal. “L” in the SP mode</td></tr>
<tr><td>2</td><td>LED LCK</td><td>O</td><td>Latch signal to transfer data to the LED driver.</td></tr>
<tr><td>3</td><td>REC MUTE</td><td>O</td><td>Hi-Fi audio record muting signal. Outputs “H” pulses when recording is started or finished.</td></tr>
<tr><td>4</td><td>SSB SCK</td><td>O</td><td>Clock signal for transfer to the video IC</td></tr>
<tr><td>5</td><td>SSB DATA</td><td>O</td><td>Data signal for transfer to the video IC</td></tr>
<tr><td>6</td><td>SENS LED</td><td>O</td><td>Top/end sensor LED drive signal</td></tr>
<tr><td>7</td><td>DECORD</td><td>I</td><td>Canal decoder detection signal. “H” is input when it is detected.</td></tr>
<tr><td>8</td><td>VPB</td><td>O</td><td>Video HA playback system ON signal. Outputs “H” during playback.</td></tr>
<tr><td>9</td><td>IIC SDA</td><td>I/O</td><td>Data signal for communications with the IIC bus (Hi-Fi/NICAM/PDC/EEPROM).</td></tr>
<tr><td>10</td><td>$\overline{\text{CAP ON}}$</td><td>O</td><td>Capstan ON signal. “L” to drive, “H” to stop</td></tr>
<tr><td>11</td><td>CAP $\overline{\text{F}}$/R</td><td>O</td><td>Capstan reverse signal. “L” for forward drive, “H” for reverse drive.</td></tr>
<tr><td>12</td><td>CAP FULL</td><td>O</td><td>Capstan acceleration signal. “H” during acceleration</td></tr>
<tr><td>13</td><td>LOAD</td><td>O</td><td rowspan="2">Loading motor drive control outputs
<table>
<tr><td>LOAD</td><td>L</td><td>H</td><td>L</td><td>H</td></tr>
<tr><td>UNLOAD</td><td>L</td><td>L</td><td>H</td><td>H</td></tr>
<tr><td></td><td>Stop</td><td>Forward</td><td>Reverse</td><td>Brake</td></tr>
</table></td></tr>
<tr><td>14</td><td>UNLOAD</td><td>O</td></tr>
<tr><td>15</td><td>TOP – SENS</td><td>I</td><td>Tape start detection signal</td></tr>
<tr><td>16</td><td>END – SENS</td><td>I</td><td>Tape end detection signal</td></tr>
<tr><td>17</td><td>MODE SW1</td><td>I</td><td>Mechanism mode switch 1</td></tr>
<tr><td>18</td><td>MODE SW2</td><td>I</td><td>Mechanism mode switch 2</td></tr>
<tr><td>19</td><td>MODE SW3</td><td>I</td><td>Mechanism mode switch 3</td></tr>
<tr><td>20</td><td>MODE SW4</td><td>I</td><td>Mechanism mode switch 4</td></tr>
<tr><td>21</td><td>CST SW</td><td>I</td><td>Cassette-down signal</td></tr>
<tr><td>22</td><td>DENV</td><td>I</td><td>Video head playback output comparison signal. “H” when the LP head output is higher than the SP head output.</td></tr>
<tr><td>23</td><td>PRT</td><td>I</td><td>Power monitoring input. “H” is input when the regulator power supply is started.</td></tr>
<tr><td>24</td><td>CG DATA</td><td>O</td><td>Outputs serial data for transfer to the OSD IC</td></tr>
<tr><td>25</td><td>CG SCK</td><td>O</td><td>Outputs serial clock for transfer to the OSD IC</td></tr>
<tr><td>26</td><td>$\overline{\text{CG CS}}$</td><td>O</td><td>Chip select signal for transfer to the OSD IC</td></tr>
<tr><td>27</td><td>CHECK</td><td>O</td><td>Analog amp check</td></tr>
<tr><td>28</td><td>TU PWM</td><td>O</td><td>Tuner PWM output</td></tr>
<tr><td>29</td><td>$\overline{\text{RMC}}$</td><td>I</td><td>Remote signal input</td></tr>
<tr><td>30</td><td>IIC SCK</td><td>O</td><td>Clock signal for communications with the IIC bus (Hi-Fi/NICAM/PDC/EEPROM)</td></tr>
<tr><td>31</td><td>$\overline{\text{U BAND}}$</td><td>O</td><td>Tuner band switching signal. “L” for U band</td></tr>
<tr><td>32</td><td>$\overline{\text{H BAND}}$</td><td>O</td><td>Tuner band switching signal. “L” for VH band</td></tr>
</table>

Pin No.	Pin Name	I/O	Description
33	$\overline{\text{L BAND}}$	O	Tuner band switching signal. "L" for VL band
34	$\overline{\text{AFT DEF}}$	O	AFT ON/OFF signal. "L" for OFF
35	T MUTE	O	Tuner audio muting signal. "L" for muting
36	$\overline{\text{JOG}}$	O	Special effects playback ON signal. "L" for ON
37	CAP UP	O	Capstan drive power voltage switching
38	$\overline{\text{I − LIMIT}}$	O	I-LIMIT switching signal. "L" for limiting
39	N. C	–	Connected to ground.
40	$\overline{\text{RESET}}$	I	CPU reset input
41	GND	–	Ground
42	XTAL	–	For the connection of a 16 MHz crystal oscillator which generates the main clock signals
43	EXTAL	–	
44	REC SAFTY	I	Erase prevention switch detection input. "L" input enables recording.
45	$\overline{\text{TEST}}$	I	Test mode start input. "L" to start.
46	(MESECAM)	O	(Video system control signal. "H" for MESECAM)
47	POWER	O	Regulator power ON signal. "H" for ON
48	T − POWER	O	PDC operation power ON signal. "H" for ON
49	AGC LEVEL	I	A/D input for the tuner reception detection state
50	$\overline{\text{WAKE − UP}}$	I	Power failure detection signal. "H" is input when a power failure has occurred.
51	$\overline{\text{TRRST}}$	I	Tracking adjustment terminal. "L" input sets the tracking to the center.
52	A VSS	–	A/D ground
53	A VREF	–	A/D reference voltage
54	A VDD	–	A/D power supply
55	$\overline{\text{SYNC DET}}$	I	Video signal detection input. "L" when there is a video signal, "L" when there is no video signal.
56	$\overline{\text{DAV}}$	I	PDC transmission enable/disable signal. "L" : Transmission is possible.
57	POS	I	A/D input for HSW control
58	A LEVEL	I	Hi-Fi audio envelope detection input for autotracking (analog input)
59	V LEVEL	I	Video envelope detection input for autotracking (analog input)
60	AFT CURVE	I	Tuner AFT status detection A/D input
61	VDD	–	+5V power supply
62	RECCAP	I	Sets the ramp of the written trapezoidal wave
63	AMP VDD	–	Power supply of amp
64	HEAD (−)	I	Connected to the negative (−) terminal of the CTL head.
65	HEAD (+)	I	Connected to the positive (+) terminal of the CTL head.
66	PBCTL(+)	I	The CTL head (+) pulses are input during playback.

Pin No.	Pin Name	I/O	Description
67	PBCTL(−)	I	The CTL head (−) pulses are input during playback.
68	AMP(−)	I	CTL first amp negative (−) terminal
69	AMP(+)	I	CTL first amp positive (+) terminal
70	AG	I	For the connection of a smoothing capacitor
71	CTL OUT	O	CTL first amp input
72	CTL IN	I	CTL second amp input
73	Amp VSS	−	Amp ground
74	VREF	O	Outputs a reference voltage for the internal amps.
75	DPG	I	Drum PG input
76	DFG	I	Drum FG input
77	CFG	I	Capstan FG input
78	CAP PWM	O	Capstan control PWM output
79	DRUM D/A	O	Drum control D/A output
80	T REEL	I	Take-up reel rotation detection
81	S REEL	I	Supply reel rotation detection
82	C SYNC	I	Composite sync input
83	FL SI	I	Serial data input to communicate with the FL driver
84	FL DATA	O	Data output to communicate with the FL driver/LED driver IC
85	FL SCK	O	Clock output to communicate with the FL driver/LED driver IC
86	TEXTAL	−	For the connection of a 32.768 kHz crystal which generates a sub-clock signal.
87	TXTAL	−	
88	GND	−	Ground
89	VDD	−	+5V power supply
90	N. C	−	Connected to a power supply
91	$\overline{\text{REC} - \text{V}}$	O	Video recording ON signal. Outputs “L” when recording.
92	H SEL	O	Video head amp switching signal. Outputs “H” when the LP head is selected.
93	C ROT	O	Chroma rotation signal. “H” when the Rch head is selected.
94	HSW − V	O	Video head amp switching signal. “H” when the 1ch head is selected.
95	HSW − A	O	Hi-Fi head switching signal
96	REC − A	O	“H” when the Hi-Fi-HA recording ON signal is recorded.
97	$\overline{\text{FL CS}}$	O	Chip select output for communications with the FL driver.
98	JOG VD	O	Artificial V sync signal
99	CA SCK	O	Outputs a clock signal for transfer to the Canal IC.
100	CA DATA	O	Outputs the data for transfer to the Canal IC.

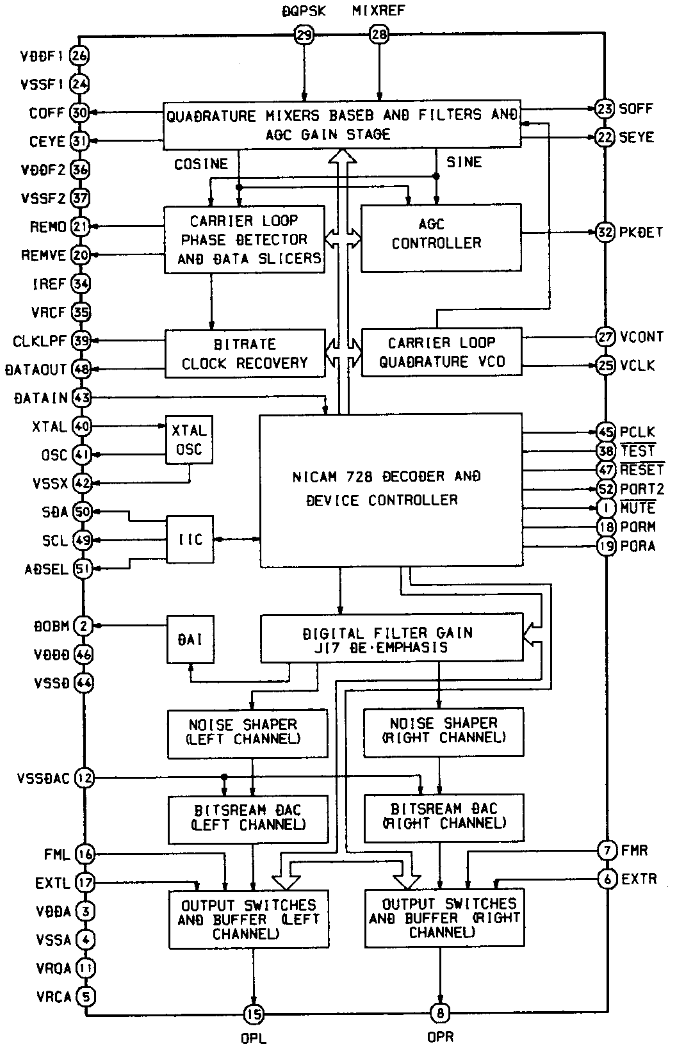
IC BLOCK DIAGRAM

IC, TDA9614H



SUPPLY & VREF
IREF
MUTE
SDA SCL
I²C
DOC
NOISE REDUCTION
AUDIO LPF
RAF+IPAF
AFO MUTE
DC SEL
VOLUME HP
HP SEL
DEC SEL
OUT SEL
LINE SEL
TUL E1L E3L
TUR E1R E3R
E2L E3L
E2R E3R
HF AGC
BPF 1.3/1.4
LEVEL DETECT
HF LIMITER
PLL
1.3MHZ 1.4MHZ
CCO
DOC
S&H
AUDIO CLIPPER
RAF
M
HF LPF
BPF 1.7/1.8
1.7MHZ 1.8MHZ
NOMUTE
AFO MUTE
RFC MUTE
RN+IPN
REC EQ
RN
PB SEL
PB EQ
LP
AOCN
NOMAL SEL
VOLUME L
VOLUME R
INPUT SEL
TUL TUR E1L E1R E2L E2R E3R
NOISE REDUCTION

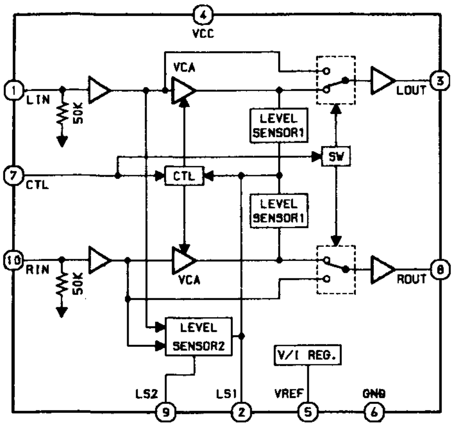
IC, SAA7283ZP



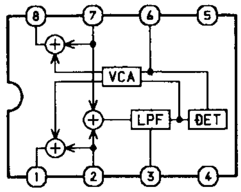
DQPSK
MIXREF
VDDF1
VSSF1
COFF
CEYE
VDDF2
VSSF2
REMD
REMVE
IREF
VRCF
CLKLPF
DATAOUT
DATAIN
XTAL
OSC
VSSX
SDA
SCL
ADSEL
DOBM
VDDD
VSSD
VSSDAC
FML
EXTL
VDDA
VSSA
VRDA
VRCA
SOFF
SEYE
PKDET
VCONT
VCLK
PCLK
TEST
RESET
PORT2
MUTE
PORM
PORA
FMR
EXTR
OPL
OPR
QUADRATURE MIXERS BASEB AND FILTERS AND AGC GAIN STAGE
COSINE
SINE
CARRIER LOOP PHASE DETECTOR AND DATA SLICERS
AGC CONTROLLER
BITRATE CLOCK RECOVERY
CARRIER LOOP QUADRATURE VCO
XTAL OSC
IIC
NICAM 728 DECODER AND DEVICE CONTROLLER
DAI
DIGITAL FILTER GAIN J17 DE-EMPHASIS
NOISE SHAPER (LEFT CHANNEL)
NOISE SHAPER (RIGHT CHANNEL)
BITSREAM DAC (LEFT CHANNEL)
BITSREAM DAC (RIGHT CHANNEL)
OUTPUT SWITCHES AND BUFFER (LEFT CHANNEL)
OUTPUT SWITCHES AND BUFFER (RIGHT CHANNEL)

⟺ REPRESENTS CONTROLLER BUS

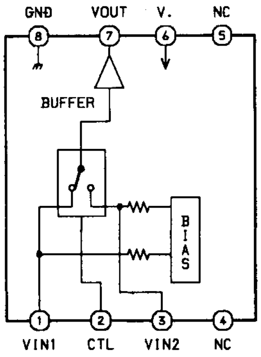
IC, AN5285K


4
VCC
VCA
1
LIN
50K
LEVEL SENSOR1
LOUT
3
SW
7
CTL
CTL
LEVEL SENSOR1
10
RIN
50K
VCA
ROUT
8
LEVEL SENSOR2
V/I REG.
LS2
LS1
VREF
GND
9
2
5
6

IC, CXA1649M

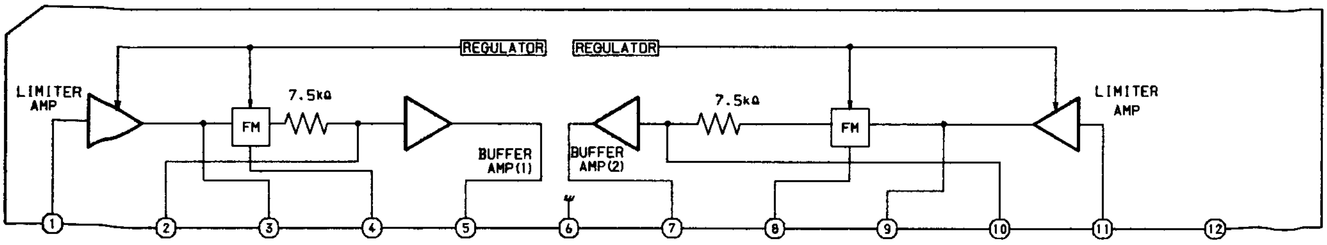

8
7
6
5
VCA
LPF
DET
1
2
3
4

IC, NJM2233BM

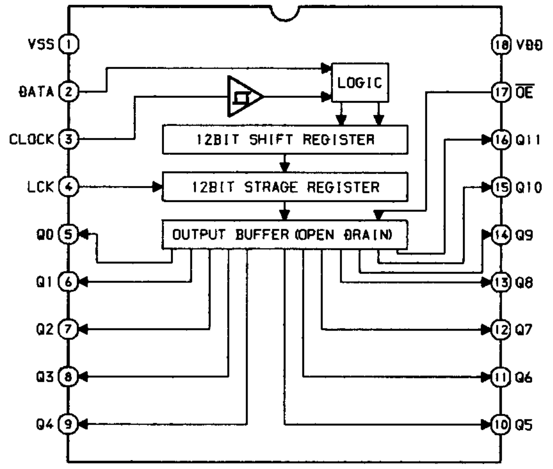

GND
VOUT
V.
NC
8
7
6
5
BUFFER
BIAS
1
2
3
4
VIN1
CTL
VIN2
NC

CTL	OUTPUT
L	VIN1
H	VIN2

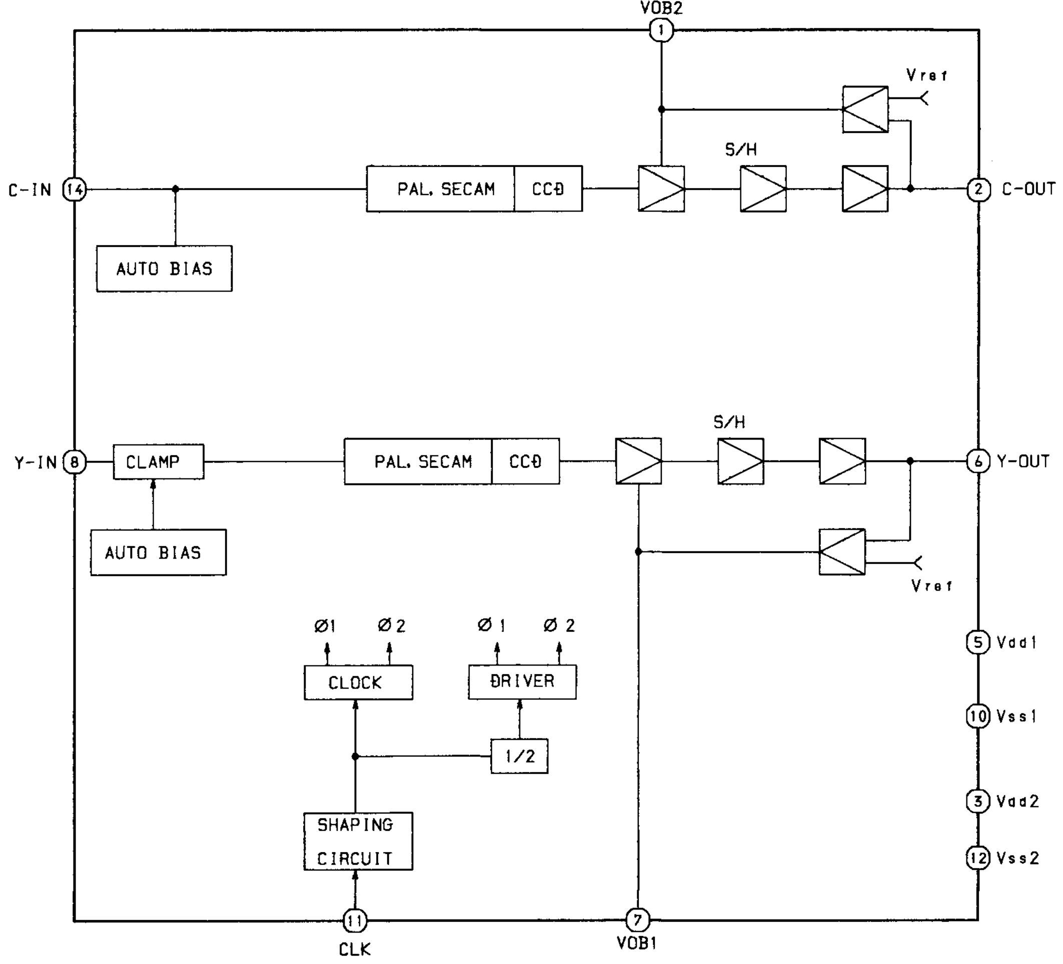
IC, TA8721ASN


REGULATOR
REGULATOR
LIMITER AMP
7.5kΩ
FM
BUFFER AMP(1)
BUFFER AMP(2)
7.5kΩ
FM
LIMITER AMP
1
2
3
4
5
6
7
8
9
10
11
12

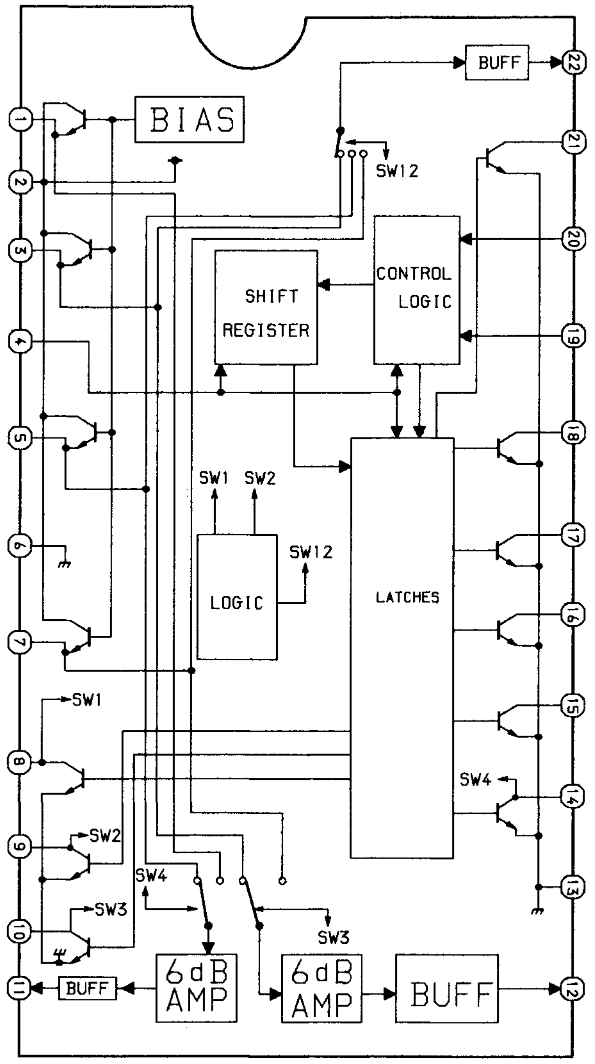
IC, BU2092F


VSS 1
DATA 2
CLOCK 3
LCK 4
Q0 5
Q1 6
Q2 7
Q3 8
Q4 9
18 VDD
17 OE
16 Q11
15 Q10
14 Q9
13 Q8
12 Q7
11 Q6
10 Q5
LOGIC
12BIT SHIFT REGISTER
12BIT STRAGE REGISTER
OUTPUT BUFFER (OPEN DRAIN)

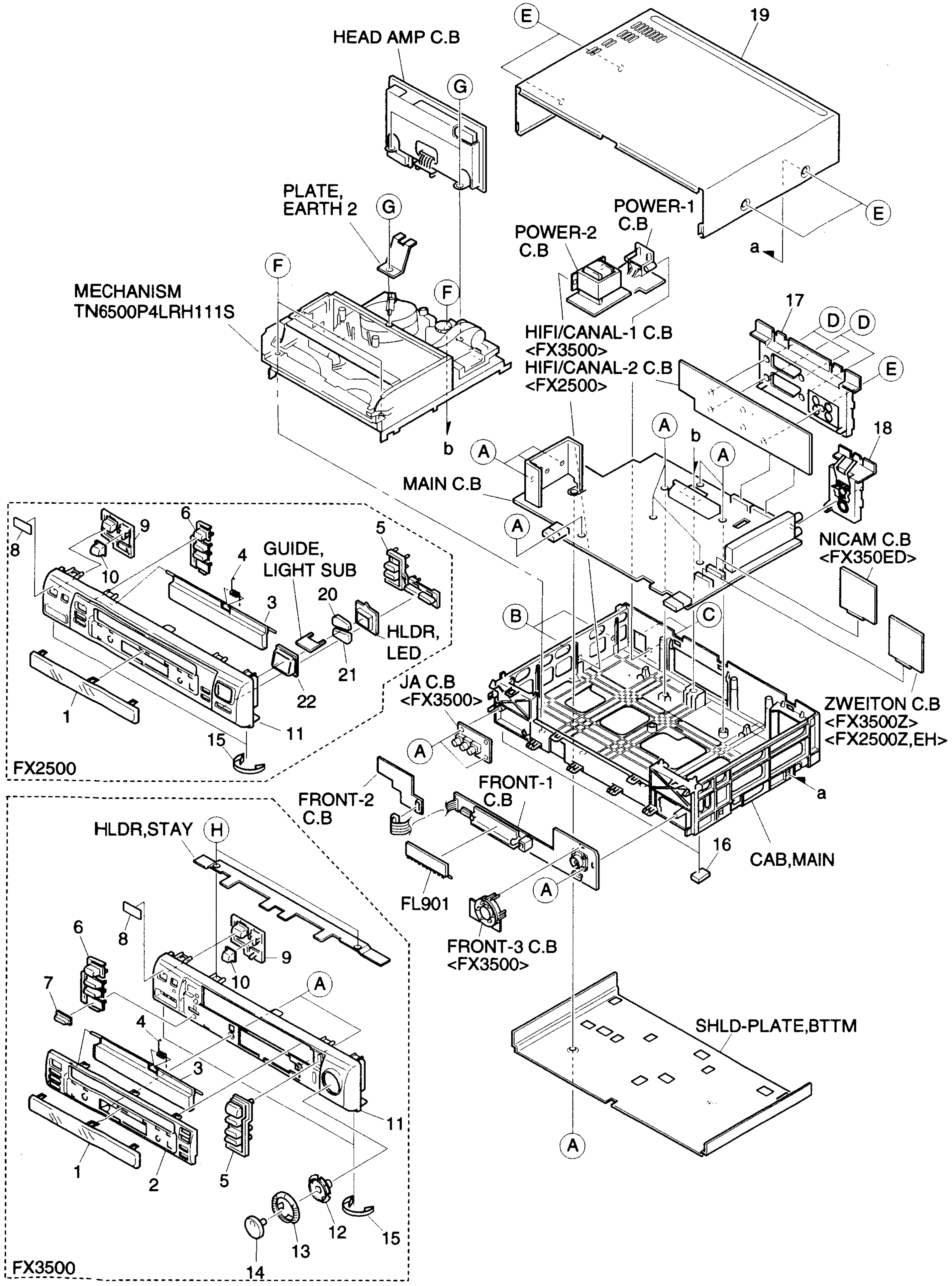
IC, MSM7460 – 63RS


VOB2 1
C-IN 14
AUTO BIAS
PAL, SECAM
CCD
S/H
Vref
2 C-OUT
Y-IN 8
CLAMP
AUTO BIAS
PAL, SECAM
CCD
S/H
6 Y-OUT
Vref
Ø1 Ø2
CLOCK
Ø1 Ø2
DRIVER
1/2
SHAPING CIRCUIT
5 Vdd1
10 Vss1
3 Vdd2
12 Vss2
11 CLK
7 VOB1

IC, BA7630S


BIAS
BUFF
SW12
CONTROL LOGIC
SHIFT REGISTER
SW1 SW2
LOGIC
SW12
LATCHES
SW1
SW2
SW3
SW4
SW4
SW3
BUFF
6dB AMP
6dB AMP
BUFF
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

MECHANICAL EXPLODED VIEW 1／1


HEAD AMP C.B
E
19
G
PLATE,
EARTH 2
G
POWER-1
C.B
POWER-2
C.B
E
a
F
F
MECHANISM
TN6500P4LRH111S
HIFI/CANAL-1 C.B
<FX3500>
HIFI/CANAL-2 C.B
<FX2500>
17
D
D
E
b
A
b
A
A
18
MAIN C.B
A
NICAM C.B
<FX350ED>
8
9
6
4
5
10
GUIDE,
LIGHT SUB
3
20
B
C
HLDR,
LED
21
22
1
11
15
FX2500
JA C.B
<FX3500>
ZWEITON C.B
<FX3500Z>
<FX2500Z,EH>
A
FRONT-2
C.B
FRONT-1
C.B
a
16
CAB,MAIN
HLDR,STAY
H
FL901
A
FRONT-3 C.B
<FX3500>
6
8
9
7
10
A
4
SHLD-PLATE,BTTM
3
11
1
2
5
12
15
13
14
A
FX3500

MECHANICAL PARTS LIST 1／1

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	86-JU1-025-01S		WINDOW,DSPLY AE<3500ED>
1	86-JU1-023-010		WINDOW,DISPLAY Z<3500Z>
1	86-JU2-010-010		WINDOW,DISPLAY Z<2500Z>
1	86-JU2-016-010		WINDOW,DISPLAY<2500EH>
2	86-JU1-004-019		PANEL,FR<3500Z,3500ED>
3	86-JU1-022-01S		DOOR,CASS Z<3500Z>
3	86-JU1-026-010		DOOR,CASS ED<3500ED>
3	86-JU2-009-010		DOOR,CASS Z<2500Z,2500EH>
4	84-JP9-202-019		SPR-T,DOOR
5	86-JU1-012-019		KEY,CONT<3500Z,3500ED>
5	86-JU2-004-019		KEY,CONT<2500Z,2500EH>
6	86-JU1-010-019		KEY,CH<3500Z,3500ED>
6	86-JU2-003-019		KEY,CH<2500Z,2500EH>
7	86-JU1-011-019		BTN,MNT<3500Z,3500ED>
8	82-NE6-067-019		BADGE AIWA 30N
9	86-JU1-008-019		KEY,POWER
10	86-JU1-009-019		BTN,PB
11	86-JU1-001-019		CABI,FR<3500Z,3500ED>
11	86-JU2-014-010		CABI,FR EH<2500Z,2500EH>
12	86-JU1-017-019		LENS,SHUTTLE<3500Z,3500ED>
13	86-JU1-014-019		KNOB,SHUTTLE<3500Z,3500ED>
14	86-JU1-013-019		KNOB,RTRY JOG<3500Z,3500ED>
15	84-JP9-021-119		PLATE,FOOT HAIR
16	81-JUK-045-019		FELT,FOOT 8-8
17	86-JU1-005-019		PANEL,JACK
18	86-JU1-006-019		PANEL,RF
19	86-JU1-030-018		CABI,STEEL UK
20	85-JU7-006-010		KEY,PLAY<2500Z,2500EH>
21	85-JU7-007-010		KEY,STOP<2500Z,2500EH>
22	86-JU2-012-010		LENS,LED<2500Z,2500EH>
A	87-067-579-019		BVT 2+3-8 W/O SLOT
B	87-078-070-019		BVIT3B+4-12
C	87-067-761-019		BVT2+3-10 BLK
D	87-078-180-019		BVT2+3.5-12(BLK)
E	87-067-660-019		BVT2+3-8W/O SLOT BLK
F	87-067-703-019		BVT2+3-10 (W/O SLOT)
G	87-067-688-019		BVTT +3-6
H	87-751-096-410		VT2+3-10 W/O SLOT<3500Z,3500ED>

■ ACCESSORIES／PACKAGE LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	86-JU2-905-010		IB,Z(E-G-DU)-W<2500Z>
1	86-JU2-906-010		IB,EH(E-G-DU)-W<2500EH>
1	86-JU1-907-010		IB,Z(E-G-DE)-W<3500Z>
1	86-JU1-908-010		IB,ED(E-G-DE)-W<3500ED>
⚠2	87-050-076-010		AC CORD SET ASSY,E
3	86-JU2-680-010		RC UNIT,RC-6VR05<2500Z,EH>
3	86-JU1-675-010		RC UNIT,RC-6VR06<3500Z,ED>
4	87-A80-032-010		CORD,PIN 2P RED-WHT
5	87-034-796-010		CORD,RF PAL S
6	86-JU1-007-010		COVER,JACK<3500Z,ED>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW,SERRART

サービス技術ニュース	
番号	連絡内容
G－　　－	
G－　　－	
G－　　－	

アイワ株式会社

AIWA CO.,LTD.

727105 750038

Tokyo Japan

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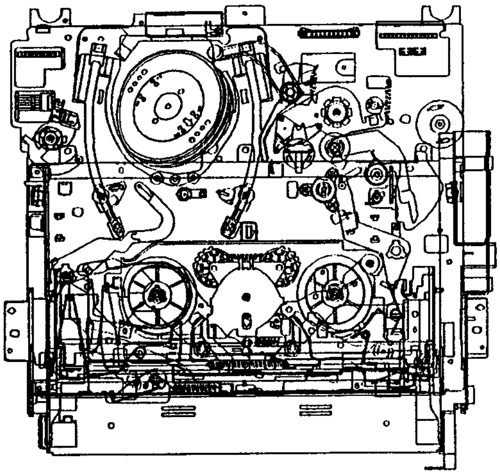
Printed in Singapore

aiwa

aiwa
SERVICE

V15136

TN-6500



VIDEO MECHANISM

• TYPE: English,Japanese

SERVICE MANUAL

BASIC NAME	DERIVATION				
	No.	NAME			
TN-6500	A	109	110		
	B	107	108		
	C	206			
	D	208			

For diffrent version of mechanism that may be introduced since the issue of this manual, only the new or modified points be discussed.

S/M Code No. 09-95B-115-90T

VCR TEST TAPE INTERCHANGEABILITY TABLE

新しいタイプのテストテープは、CH-1 (NTSC用) とCH-2 (PAL用) の2種類があります。それぞれのテープには、(1) ~ (4) で区別する4種類の信号が、次の順番と時間で記録されています。
There are two types of the new allgnment tape CH-1B (for NTSC) and CH-2 (for PAL) . On each tape four signals (1) - (4) are recorded for the times and in the order shown below.

(1) : 8min. → (2) : 2min. → (3) : 5min. → (4) : 5min.

TTV-MP1 (M-PAL用) ,TTV-MS1 (MESECAM用) ,TTV-S1 (SECAM用) については現行通りです。
The TTV-MP1 (for M-PAL) ,TTV-MS1 (for MESECAM) and TTV-S1 (for SECAM) allgnment tapes have the same contents as the previous tapes.

方式 Method	現行タイプ Now in use TYPE		新タイプ New Type		主な用途 Application
	テープ名 Model	記録内容 ※1 Contents ※1	テープ名 Model	記録内容 ※1 Contents ※1	
NTSC	TTV-N1	NTSC,Color, 1kHz,SP	CH-1B(2)	NTSC,Stairsteps, 1kHz,SP	PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 PB-Y Level/General electrical ADJ.Head ACE Height/Tilt ADJ.
	TTV-N1E	NTSC,Color, 1kHz,EP	CH-1B(4) ※2	NTSC,Color,1kHz, EP	ｽｲｯﾁﾝｸﾞ位置調整。 Switching position ADJ.
	TTV-N2	NTSC,Stairsteps, 7kHz,SP	CH-1B(1)	NTSC,Stairsteps, 7kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。ｽｰﾊﾟｰｸﾘｱｰﾋﾟｸﾁｬｰのﾚﾍﾞﾙ調整。 Head ACE Azimuth ADJ.
	TTV-N12 (SCV-1998)	NTSC,Color, 1kHz,SP	CH-1B(4)	NTSC,Color,1kHz, EP	FMｴﾝﾍﾞﾛｰﾌﾟ調整。Xﾊﾞﾘｭｰ(位相)調整。 FM Envelope ADJ. X-Value ADJ.
	TTV-N7A	NTSC,Stairsteps, 1kHz,SP,HiFi400Hz	CH-1B(3)	NTSC,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
PAL	TTV-P1	PAL,Color, 1kHz,SP	CH-2(2) ※3	PAL,Stairsteps, 1kHz,SP	ｽｲｯﾁﾝｸﾞ位置調整。(SP専用ﾓﾃﾞﾙ)PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 Switching position ADJ. PB-Y Level/General electrical ADJ. Head ACE Height/Tilt ADJ.
	TTV-P1L	PAL,Color, 1kHz,LP	CH-2(4)	PAL,Color,1kHz, LP	ｽｲｯﾁﾝｸﾞ位置調整。(LP対応ﾓﾃﾞﾙ)FMｴﾝﾍﾞﾛｰﾌﾟ調整。(LP対応ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(LP対応ﾓﾃﾞﾙ) Switching position.(LP Model)FM Envelope ADJ. (LP Model)X-Value ADJ.(LP Model)
	TTV-P2	PAL,Stairsteps, 6kHz,SP	CH-2(1)	PAL,Stairsteps, 6kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。FMｴﾝﾍﾞﾛｰﾌﾟ調整。(SP専用ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(SP専用ﾓﾃﾞﾙ) Head ACE Azimuth ADJ. FM Envelope ADJ.(SP Model) X-Value ADJ.(SP Model)
	TTV-P7	PAL,Stairsteps, 1kHz,SP,HiFi 1kHz	CH-2(3)	PAL,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
	TTV-P16	PAL,Color, 400Hz,SP,HiFi 1kHz	変更なし No Changed.		FMﾌｨﾙﾀｰ調整 FM Filter ADJ.

※ 1. ｶﾗｰ方式→映像信号→ﾉｰﾏﾙ音声→ﾃｰﾌﾟｽﾋﾟｰﾄﾞ→HiFi音声 の順で記載されています。
※ 1. Described in the order of color format. video signal. linear audio. tape speed and Hi-Fi audio.
※ 2. SP専用ﾓﾃﾞﾙの場合は、CH-1B の (1) ~ (3) を使用して下さい。
※ 2.Use CH-1B (1) - (3) with models used exclusively in the SP mode.
※ 3. 色信号の観測が必要な場合はCH-2の (3) または (4) を使用して下さい。
※ 3.Use CH-2 (3) and (4) when it is necessary to observe the chroma signal.

STANDARD MAINTENANCE

1. SERVICE SCHEDULE

○：チェック　●：交換

デッキ			定期サービス表			
BLOCK NAME	Ref. No.	部品名	1000h	2000h	3000h	4000h
	110	TENSION ARM ASS' Y		●		●
	80, 81	T.S REEL ASS' Y			●	
	120	SUB PLATE ASS' Y		●		●
	142	LOADING MOTOR ASS' Y			●	
	100	CAPSTAN MOTOR		●		●
	90	PINCH ROLLER ARM ASS' Y		●		●
	123	RF CLUTCH ASS' Y		●		●
	61	ACE HEAD HVMZA1220			●	
	66	FE HEAD BASE ASS' Y			●	
	5	DRUM EARTH ASS' Y			●	
	1	CYLINDAR ASS' Y	○	●	○	●

注意：

- テープ走行系のすべての部品を清掃し、清掃後はデッキ調整すべてを行なうこと。
  ビデオヘッド/ピンチローラ/ACEヘッド/フルイレーズヘッド

2. CLEANING

1.　ビデオヘッドの清掃（Fig-1 参照）

1) スチールキャビネットをはずす。
2) 素手でアッパードラムやロワードラムに触れぬ様手袋（薄いもの）をする。
3) ヘッドクリーニング用クロス又はセーム（鹿）皮にアルコールを2、3滴つけ、ヘッドチップに軽くあてててアッパードラムを反時計方向に回す。

注意

- ビデオヘッドは非常に硬い物質でできていますが、非常に薄いため、縦方向に清掃するのは避けて下さい。
- 清掃した箇所が乾くまでセットを作動しないで下さい。
- 汚れたヘッドクリーニング用クロス又はセーム（鹿）皮は再使用しないで下さい。

2.　ACヘッドのクリーニング（Fig-2 参照）

1) スチールキャビネットを外す。
2) ヘッドクリーニング用クロス又はセーム（鹿）皮にアルコールを2、3滴つけて、アッパードラムや他の走行系部品を痛めない様注意しながら、クリーニングする。

注意

- ACヘッドを縦方向にクリーニングしないで下さい。
- クリーニングした箇所が乾くまでセットを作動しないで下さい。

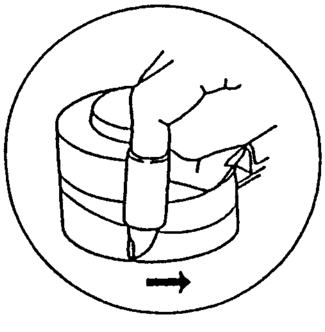


Fig-1

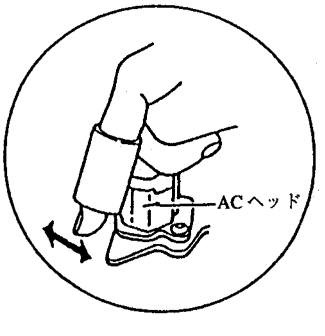


Fig-2

STANDARD MAINTENANCE

1. SERVICE SCHEDULE

○ : Check ● : Replacement

Deck			Periodic Maintenance Table			
BLOCK NAME	Ref. No.	PARTS NAME	1000h	2000h	3000h	4000h
	110	TENSION ARM ASS' Y		●		●
	80, 81	T.S REEL ASS' Y			●	
	120	SUB PLATE ASS' Y		●		●
	142	LOADING MOTOR ASS' Y			●	
	100	CAPSTAN MOTOR		●		●
	90	PINCH ROLLER ARM ASS' Y		●		●
	123	RF CLUTCH ASS' Y		●		●
	61	ACE HEAD HVMZA1220			●	
	66	FE HEAD BASE ASS' Y			●	
	5	DRUM EARTH ASS' Y			●	
	1	CYLINDAR ASS' Y	○	●	○	●

Note:

- Clean all the parts of the tape running mechanism. After cleaning the parts, perform all items of the deck adjustment.
  Video Head, Pinch Roller, ACE Head and Full Erase Head

2. CLEANING

1. Video Head Cleaning (Refer to Fig-1.)

1) Remove the steel cabinet.
2) Do not touch the upper drum and lower drum with bare hand. Put on gloves (thin).
3) Apply two or three drops of alcohol to the head cleaning cloth or chamois. Touch the head cleaning cloth gently on the head tip and turn the upper drum counter-clockwise for cleaning.

Caution

- Even though the video head is made of very hard material, it is very thin. Never move the cleaning cloth vertically.
- Do not operate the machine before the cleaned areas are dried up.
- Do not re-use the stained head cleaning cloth or chamois.

2. ACE Head Cleaning (Refer to Fig-2.)

1) Remove the steel cabinet.
2) Apply two or three drops of alcohol to the head cleaning cloth or chamois. Clean the ACE head while taking care not to give damage to the upper drum and other tape path mechanical parts.

Caution

- Do not move the cleaning cloth vertically on the ACE head.
- Do not operate the machine before the cleaned areas are dried up.

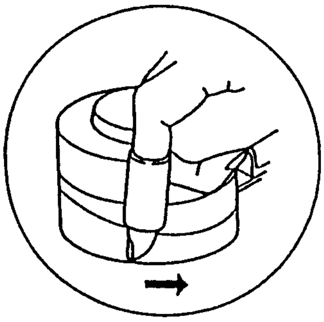


Fig-1

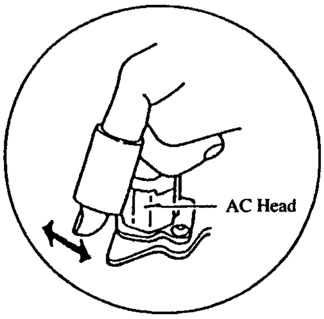


Fig-2

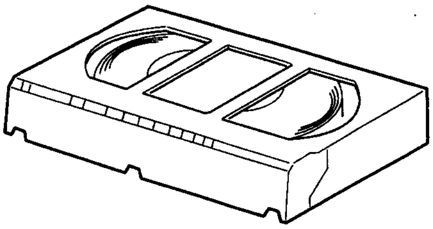
SERVICE JIG AND TOOLS

1. ALIGNMENT TAPES FOR ADJUSTMENT

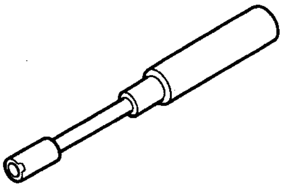
DERIVATION No.		A	B	C	D
Mechanism Adjustment		PAL SP/LP 2/4 Head	PAL SP 2Head	NTSC SP/EP 2/4 Head	NTSC SP/EP 2 Head (HIFI)
FM Envelope		CH-2(4) (TTV-P1L)	CH-2(1) (TTV-P2)	CH-1B(4) (TTV-N12)	CH-B(1) (TTV-N2)
AC Head	Tilt	Blank Tape			
	Height	CH-2(2) (TTV-P1)	CH-2(2) (TTV-P1)	CH-1B(2) (TTV-N1)	CH-1B(2) (TTV-N1)
	Azimuth	CH-2(1) (TTV-P2)	CH-2(1) (TTV-P2)	CH-1B(1) (TTV-N2)	CH-1B(1) (TTV-N2)
X Value		CH-2(4) (TTV-P1L)	CH-2(1) (TTV-P2)	CH-1B(4) (TTV-N12)	CH-1B(2) (TTV-N1)
Back Tension		SRK-VHT-103			

Ref No.	Name	Use
J-1	Torque meter (SRK-VHT-063)	Back tension measurement
J-2	Adjustment Screwdriver (Small) SV-TG0-030-000	Tape path
J-3	Adjustment Screwdriver (Large) SV-TG0-020-000	Tape path
J-4	Box Type Screwdriver M3	Tape path
J-5	Mirror	Tape path

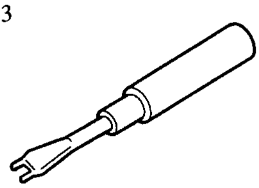
J-1



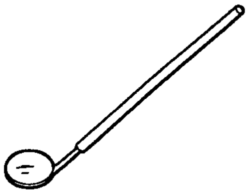
J-4



J-2, J-3



J-5

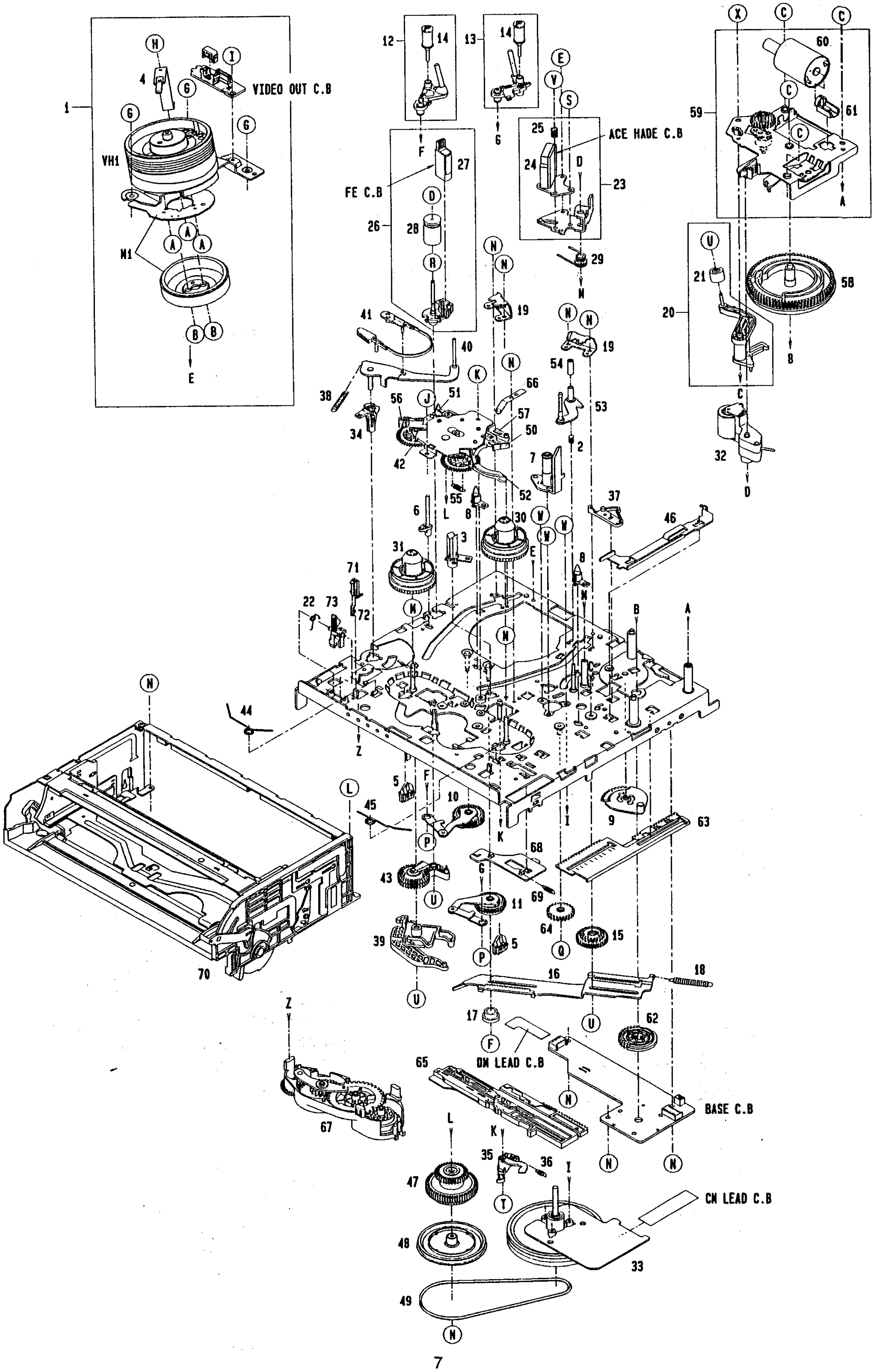


DISASSEMBLY PARTS LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO.	PART NO.	カンリ NO.	DESCRIPTION
1	S8-067-017-060	--	CYLINDAR ASS'Y<208>
1	S8-066-016-030	--	CYLINDAR ASS'Y<109>
1	S8-066-016-010	--	CYLINDAR ASS'Y<107,108>
1	S8-066-016-080	--	CYLINDAR ASS'Y<110>
1	S8-065-017-010	--	CYLINDAR ASS'Y<206>
2	S8-065-170-050	--	RG ARM SPRING<110,208>
3	S8-065-130-010	--	OPTICAL LEADER
4	S8-065-015-010	--	DRUM EARTH ASS'Y
5	S8-065-133-030	--	RS LEADER
6	S8-065-023-010	--	F POST METAL ASS'Y
7	S8-065-023-020	--	TAPE GUIDE ASS'Y
8	S8-063-020-230	0E	CASSETE GUIDE BOSS
9	S8-065-035-020	--	LOADING LEVER KASIME
10	S8-063-033-050	2A	LOADING PLATE L ASS'Y
11	S8-065-033-050	--	LOADING PLATE R ASS'Y
12	S8-065-033-030	--	L BLOCK L ASS'Y
13	S8-065-033-040	--	L BLOCK R ASS'Y
14	S8-063-030-090	2A	ROLLER POST
15	S8-065-030-040	--	LOADING GEAR
16	S8-065-030-050	--	L GEAR PLATE
17	S8-065-030-110	--	L GEAR PLATE COLLOR
18	S8-065-030-100	--	L GEAR PLATE SPRING
19	S8-065-030-010	--	LD CATCHER
20	S8-065-033-060	--	HEAD CLEANING ASS'Y
21	S8-063-030-290	--	CLEANING ROLLER ASS'Y
22	S8-065-130-050	--	REC LEVER SPRING<EXCEPT 107,206>
23	S8-065-043-030	--	AC HEAD BASE ASS'Y<107,206>
23	S8-065-043-020	--	ACE HEAD BASE ASS'Y<EXCEPT 107,206>
24	S6-204-030-240	--	AC HEAD HVMZB1030(ACH1)<107,206>
24	S6-204-150-200	--	ACE HEAD HVMZA1220(ACEH1)<EXCEPT 107,206>
25	S8-000-060-040	0E	AZIMUTH SPRING
26	S8-065-043-010	--	FE HEAD BASE ASS'Y
27	S6-209-150-040	--	VTR1X2ERS11107<EXCEPT 107,206>
28	S8-063-043-060	--	IMPEDANCE ROLLER ASS'Y
29	S8-065-040-020	--	HEAD BASE SPRING
30	S8-065-053-010	--	T REEL ASS'Y
31	S8-065-053-020	--	S REEL ASS'Y
32	S8-065-063-010	--	PINCH ROLLER ARM ASS'Y
33	S6-003-030-600	--	CAPSTAN MOTOR F2QTB10 (M2)
34	S8-063-080-040	1A	BT ARM METAL
35	S8-065-073-010	--	C BRAKE ASS'Y
36	S8-065-070-020	--	C BRAKE SPRING
37	S8-065-170-040	--	RG LEVER
38	S8-065-080-020	--	BT SPRING
39	S8-065-080-060	--	BT LEVER
40	S8-065-083-020	--	TENSION ARM SEMI ASS'Y
41	S8-065-083-030	--	BT BAND ASS'Y
42	S8-065-093-030	--	SUB PLATE ASS'Y
43	S8-065-093-040	--	RF CLUTCH ASS'Y
44	S8-065-100-070	--	TS BRAKE SPRING
45	S8-065-100-090	--	SS BRAKE SPRING
46	S8-065-100-100	--	TS BRAKE LEVER
47	S8-065-093-020	--	CLUTCH ASS'Y
48	S8-065-093-010	--	CLUTCH PULLY ASS'Y
49	S8-065-090-200	--	DRIVE BELT
50	S8-065-103-010	--	T MAIN BRAKE ASS'Y
51	S8-065-103-020	--	S MAIN BRAKE ASS'Y
52	S8-065-103-030	--	T SOFT BRAKE ASS'Y
53	S8-065-175-010	--	RG ARM KASIME
54	S8-065-170-030	--	RG ADJUST NUT
55	S8-065-100-050	--	MAIN BRAKE SPRING
56	S8-065-100-080	--	S SOFT BRAKE ARM
57	S8-065-110-140	--	REVERSE LEVER PIN
58	S8-065-113-020	--	CAM GEAR ASS'Y
59	S8-065-113-010	--	CAM PLATE ASS'Y
60	S8-065-113-030	--	LOADING MOTOR ASS'Y(M3)
61	S8-065-110-110	--	MOTOR HOLDER
62	S8-065-110-040	--	M GEAR
63	S8-065-113-050	--	M GEAR PLATE ASS'Y
64	S8-065-110-070	--	M RELAY GEAR
65	S8-065-110-080	--	M SLIDE PLATE
66	S8-065-110-170	--	R LEVER SPRING PLATE
67	S8-065-153-010	--	FD GEAR CASE ASS'Y
68	S8-065-150-090	--	FD SLIDE PLATE
69	S8-065-150-100	--	FD SLIDE PLATE SP
70	S8-065-163-010	--	FRONT LOADING ASS'Y
71	S8-065-130-060	--	IN SWITCH SLIDER
72	S8-065-130-070	--	IN SW SLIDER SPRING
73	S8-065-130-040	--	REC SWITCH LEVER<EXCEPT 107,206>
A	-- -- -- -- --	--	TAMS SCREW 2.6X15
B	-- -- -- -- --	--	ROTOR SCREW B ASS'Y
C	S9-P02-260-510	0E	TAMS SCREW 2.6X5
D	S9-W02-300-500	0E	POLTSIDER WASHER(C) 1.6X3.8X0
E	S9-P09-300-610	0E	SCREW (SHARP-POINTED) 3X6
F	S9-W02-300-600	0E	POLYSLIDER WASHER(C) 2.1X5X0.
G	S9-P04-300-510	--	TAPPING SCREW 3.0X5
H	S9-P04-260-410	0E	TAPPING SCREW 2.6X4
I	S9-P12-260-640	0E	TAMS SCREW (TAPPING) S 2.6X6
J	S9-C04-265-030	--	CAMERA SCREW(TAPPING)S 2.6X5
K	-- -- -- -- --	--	TAPPING SCREW 2.0X4
L	S9-B03-260-510	0E	TAPPING SCREW(BIND) 2.6X5
M	S9-W03-301-100	0E	NYLON WASHER 2.5X5X0.3
N	S9-P04-260-510	0E	TAPPING SCREW 2.6X5
P	S9-W06-501-100	0E	HL WASHER(CUT)4.5X7X0.5
Q	S9-W06-301-000	--	HLW(C) 2.6X6X0.3
R	S9-W06-300-400	0E	HL WASHER(CUT) 1.55X4.5X0.3
S	S9-P01-260-720	0E	SCREW 2.6X7
T	S9-W02-501-000	0E	POLYSLIDER WASHER(C)2.1X5X0.5
U	S9-W02-501-100	0E	POLYSLIDER WASHER(C)2.6X6X0.5
V	S8-000-060-260	0E	AZIMATH SPRING SCREW
W	S9-P07-260-610	--	TAPPING SCREW P 2.6 X 6
X	S9-F22-260-810	--	ADJUST SCREW 2.6X8

EXPLODED VIEW


1
4
VH1
M1
VIDEO OUT C.B
12
13
14
FE C.B
26
27
28
ACE HADE C.B
23
24
25
29
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10
9
45
43
68
69
11
64
15
63
39
16
18
17
62
DN LEAD C.B
65
BASE C.B
70
67
35
36
47
48
49
33
CN LEAD C.B

HOW TO ASSEMBLE THE PARTS

1. L GEAR PLATE

L GEAR PLATE (16) の取付けの際は以下 1) ～ 4) に注意すること。

1) L BLOCK R ASSY (13) と L BLOCK L ASSY (12) がアンスレッディング状態であること。
2) LOADING GEAR (15) と L GEAR PLATE (16) のマークを合わせる。
3) LOADING PLATE R ASSY (11) と L GEAR PLATE (16) のマークを合わせる。
4) LOADING LEVER KASIME (9) が矢印方向に止まるまで回転していること。

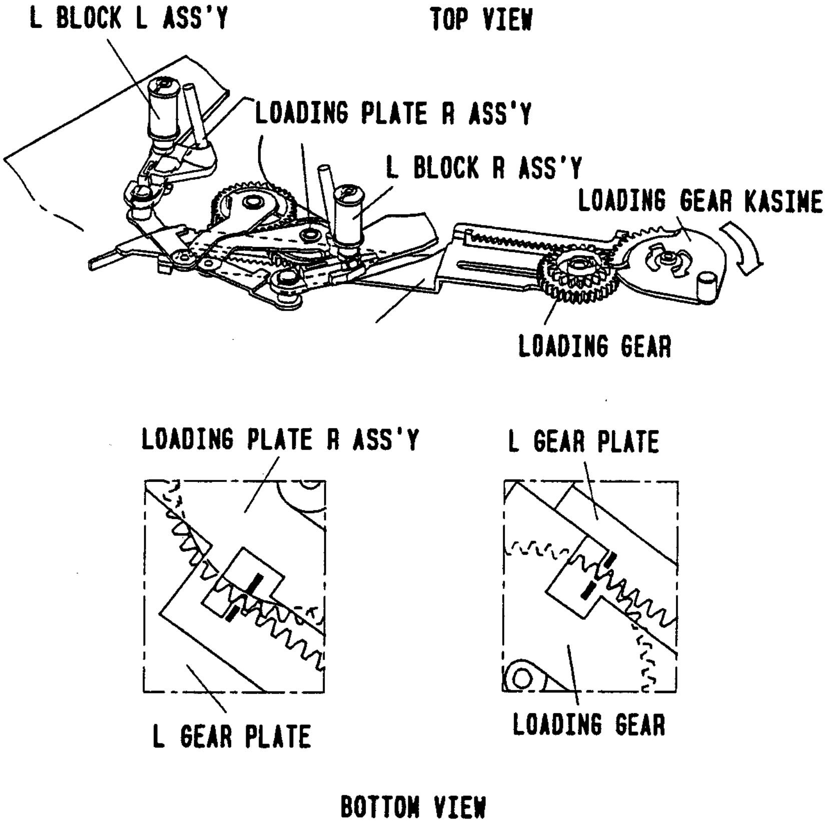

L BLOCK L ASS'Y
TOP VIEW
LOADING PLATE R ASS'Y
L BLOCK R ASS'Y
LOADING GEAR KASIME
LOADING GEAR
LOADING PLATE R ASS'Y
L GEAR PLATE
L GEAR PLATE
LOADING GEAR
BOTTOM VIEW

Fig-1

2. ACE HEAD BASE ASSY

1) ビス Ⓥ を完全に締めつけ、※部が平行になるようにビス Ⓢ を締めながら調整する。

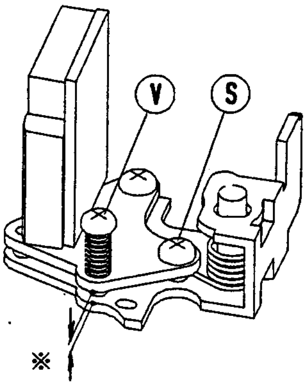


Fig-2

3. RF CLUTCH ASSY

1) M SLIDE PLATE (65) の構に RF CLUTCH ASSY (43) のシャフトを入れる。

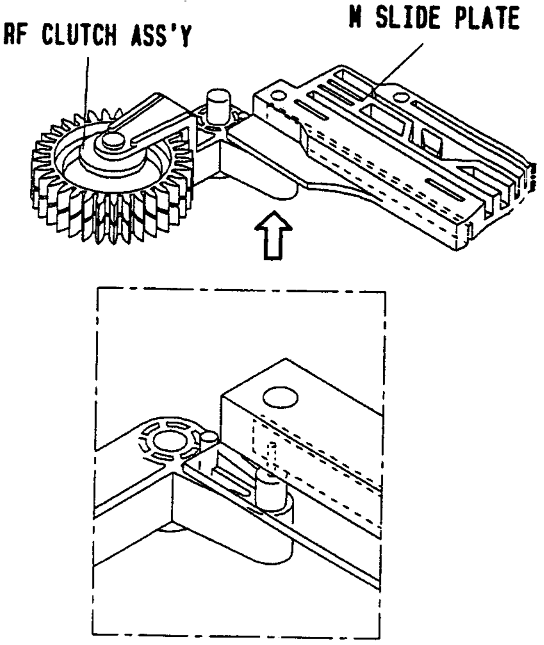

RF CLUTCH ASS'Y
M SLIDE PLATE

Fig-3

4. FD SLIDE PLATE SP

1) FD GEAR 1とFD GEAR 2のマークを合わせる。

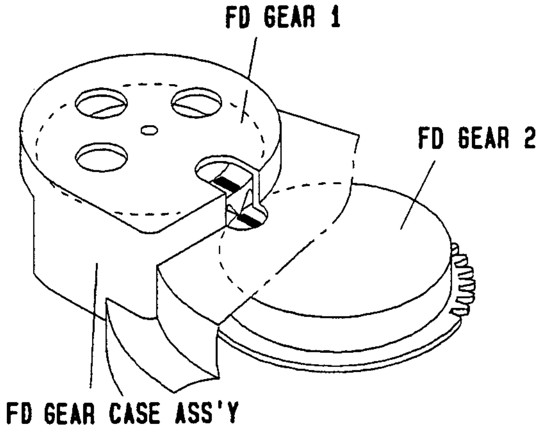

FD GEAR 1
FD GEAR 2
FD GEAR CASE ASS'Y

Fig-4

2) FD SLIDE PLATE (68)を取り付ける時、突起部分がFig-5①、②の様に溝に入ること。

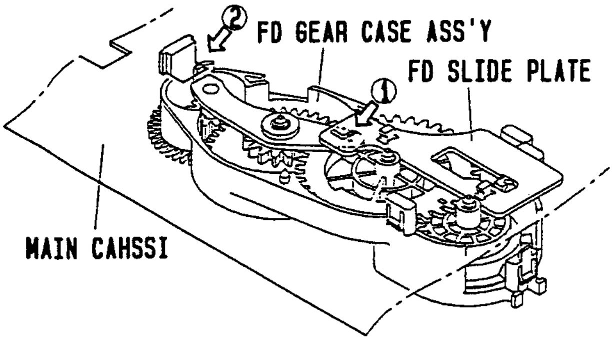

②
FD GEAR CASE ASS'Y
①
FD SLIDE PLATE
MAIN CAHSSI

Fig-5

5. M SLIDE PLATE/M RELAY GEAR/M GEAR PLATE ASSY/M GEAR

1) M GEAR PLATE ASSY (63)とM GEAR (62)のマークを合わせて取り付ける。
2) M RELAY GEAR (64)は、M SLIDE PLATE (65)のマークと合わせて取り付ける。

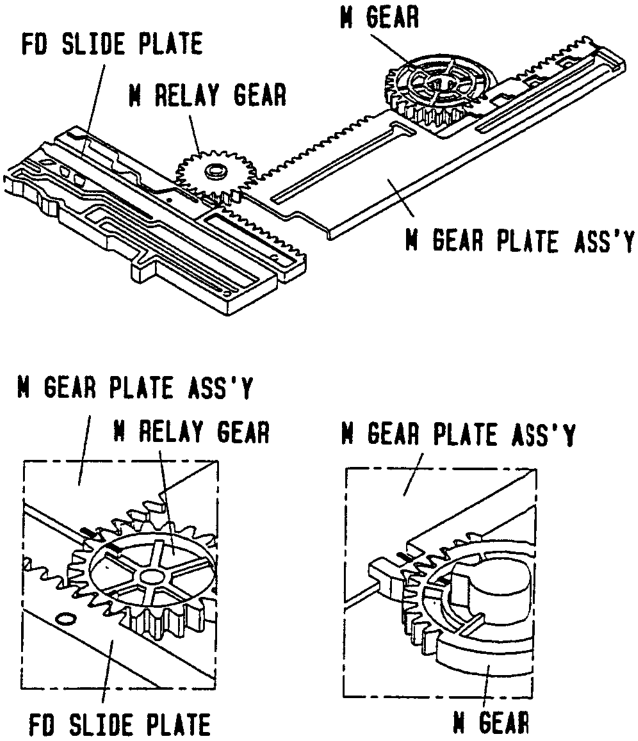

M GEAR
FD SLIDE PLATE
M RELAY GEAR
M GEAR PLATE ASS'Y
M GEAR PLATE ASS'Y
M RELAY GEAR
M GEAR PLATE ASS'Y
FD SLIDE PLATE
M GEAR

Fig-6

6. SUB PLATE ASSY

1) S SOFT BRAKE ARM (56) のシャフトを MAIN CHASSIS の①部に入れる。
2) S MAIN BRAKE ASSY (51) のシャフトを M SLIDE PLATE (65) のカム溝2部に入れる。
3) T SOFT BRAKE ASSY のシャフトを MAIN CHASSIS の④部に入れる。
4) T MAIN BRAKE ASSY (50) のシャフトを MAIN CHASSIS の③部に入れる。
5) REVERSE LEVER PIN (57) のシャフトを M SLIDE PLATE のカム構⑤部に入れる。

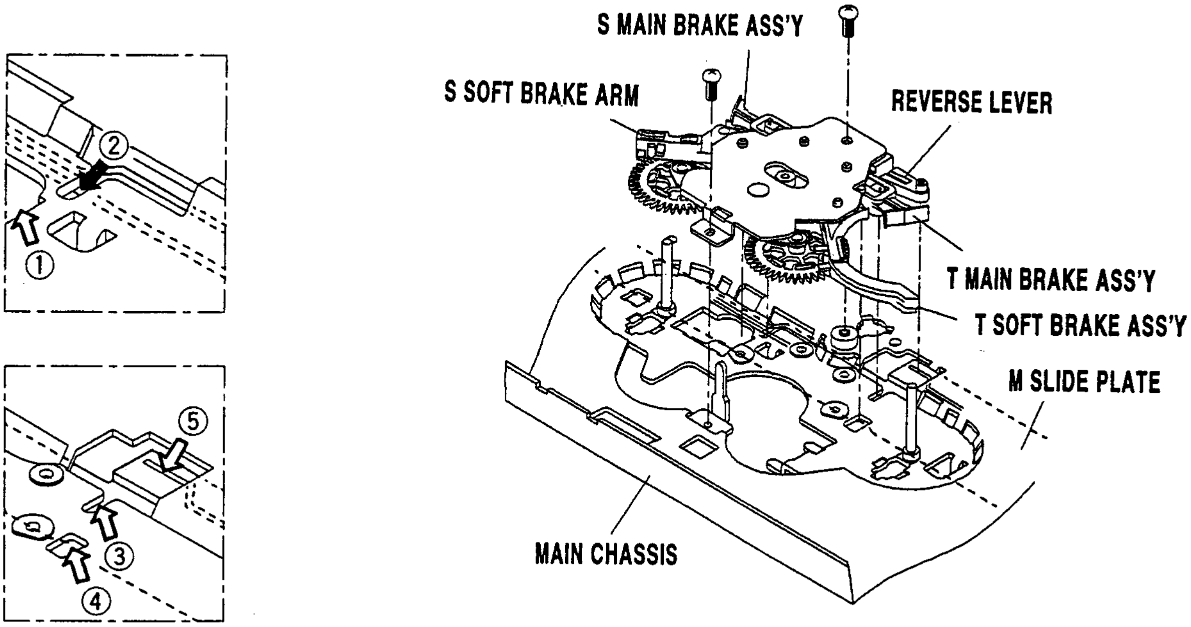

S MAIN BRAKE ASS'Y
S SOFT BRAKE ARM
REVERSE LEVER
T MAIN BRAKE ASS'Y
T SOFT BRAKE ASS'Y
M SLIDE PLATE
MAIN CHASSIS
②
①
⑤
③
④

Fig-7

7. CAM GEAR ASSY と LOADING LEVER KASIME

1) メカがアンスレッディング状態であることを確認する。
2) CAM GEAR ASSY (58) の裏側のカム溝に LOADING LEVER KASIME (9) のポストに入る様に取り付ける。

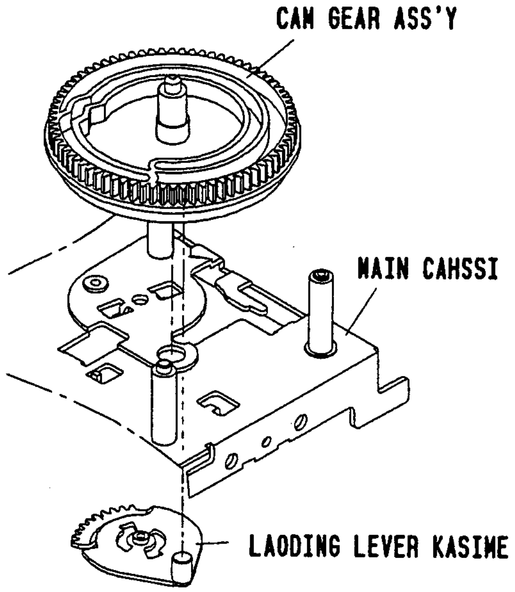

CAM GEAR ASS'Y
MAIN CAHSSI
LAODING LEVER KASIME

Fig-8

8. HEAD CLEANING ASSY

1) HEAD CLEANING ASSY (20) は、レバーの位置が矢印部分に組み込まれること。(誤った位置にレバーが組み込まれると正常に動作しません。)

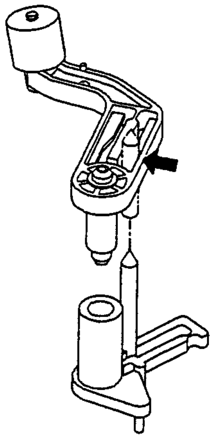


Fig-9

9. FRONT LOADING ASSY

1) CASSETTE HOLDER ASSY は、カセット IN 状態で FRAME R BLOCK、FRAME L BLOCK に取り付ける。

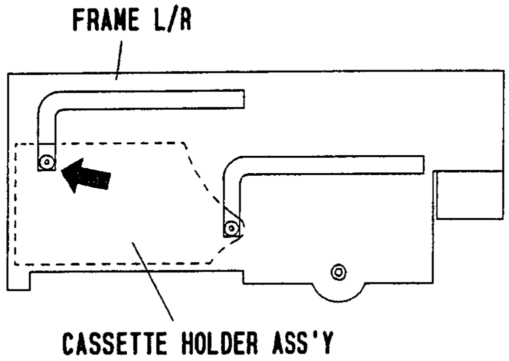

FRAME L/R
CASSETTE HOLDER ASS'Y

Fig-10

2) CASSETTE HOLDER ASSY を FRAME L、FRAME R に取り付ける。
3) シャフトがレバーの右側にくる様に取り付ける。

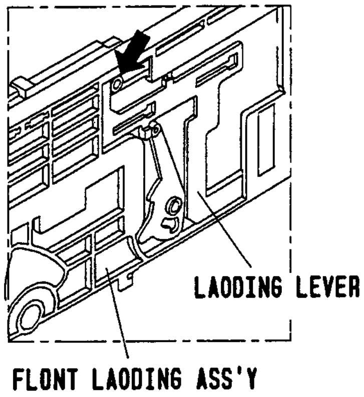

LAODING LEVER
FLONT LAODING ASS'Y

Fig-11

4) FD SLIDE PLATE SP (69) を参考にギアの位相がずれない様に FRONT LOADING ASSY (70) を取り付ける。

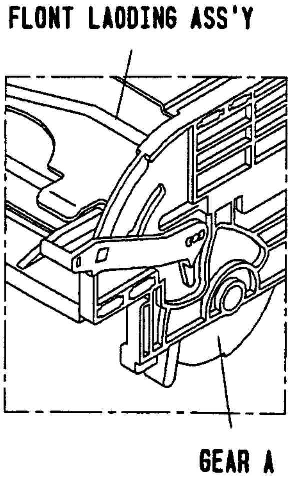

FLONT LAODING ASS'Y
GEAR A

Fig-12

〈注意〉

すべての組み立てが終了時、手動にて CASSETTE HOLDER ASSY をローディング、アンローディングさせて下さい。その際、キャプスタンモータが連動して回転する事を確認して下さい。うまくいかない場合 "5. MSLIDE PLATE/MRELAY GEAR/ M GEAR PLATE ASSY/M GEAR" の位相合わせを再確認して下さい。

10. CAM PLATE ASSYの取り付け

CAM PLATE ASSYはPINCH ROLLER ASSY, CAM GEAR ASSY, HEAD CLEANING ASSYの軸をそれぞれⓒⓓⓔに組み込みます。そしてⓐ×2、ⓑ×2の4本のビスで止めます。その時以下の点に注意して下さい。(8. HEAD CLEANING ASSYを参照)

1) AC HEAD ASSYは①方向に押し下げながら、更に②方向に止まるまで回す。(CAM PLATE ASSYの取り付けが完了するまでこの状態を保持する。)
2) CAM GEAR ASSYを③方向に止まるまで回す。(CAM PLATE ASSYの取り付けが完了するまでこの状態を保持する。)
3) Ⓐで示すLEVERの溝に、Ⓑで示すPINCH ROLLER ASSYのスプリングが入ること。
4) LEVERの軸 (Ⓐ点の反対側) が、④で示すように、CAM GEAR ASSYの溝に入ること。
5) CAM PLATE ASSYのCAMがⓕで示すシャーシの穴に入ること。

以上1) ~5) の全てが満たされないと、CAM PLATE ASSYをうまく取り付けることはできません。

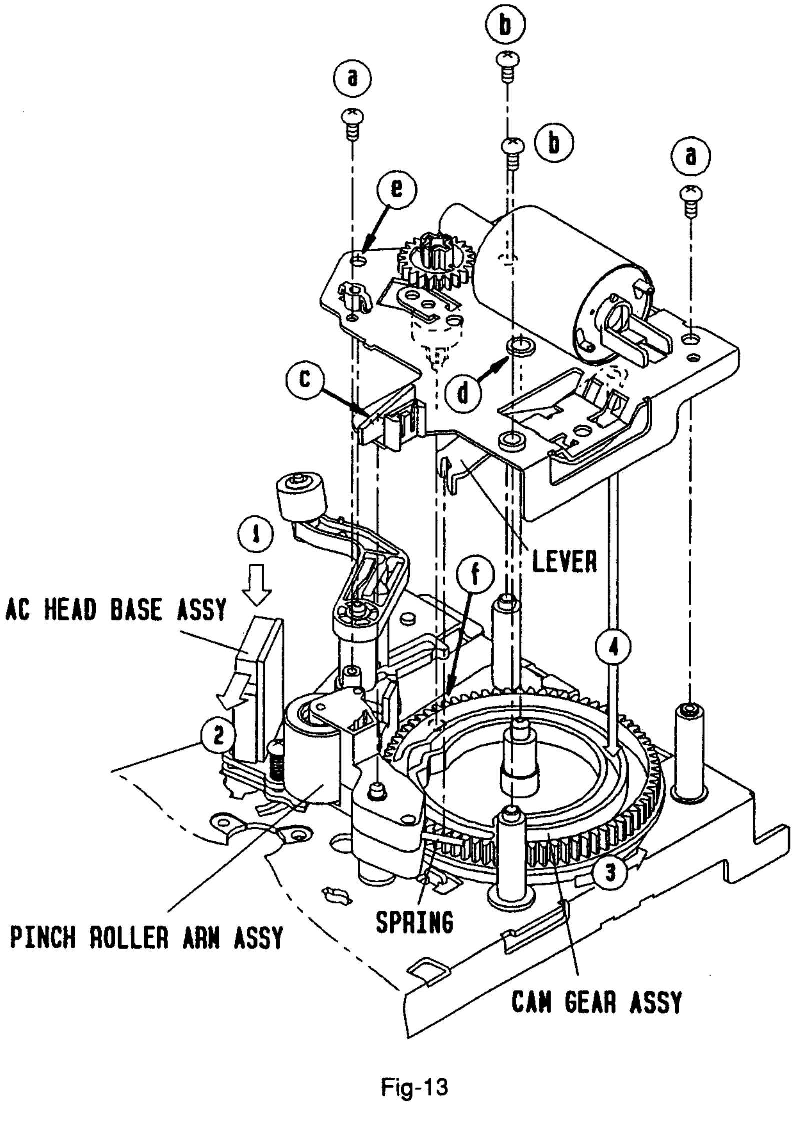

ⓑ
ⓐ
ⓑ
ⓐ
ⓔ
ⓒ
ⓓ
LEVER
①
ⓕ
AC HEAD BASE ASSY
④
②
③
SPRING
PINCH ROLLER ARM ASSY
CAM GEAR ASSY

Fig-13

HOW TO ASSEMBLE THE PARTS

1. L GEAR PLATE

Observe the following precautions when attaching the L GEAR PLATE (16).

1) Confirm that the BLOCK R. ASSY (13) and the BLOCK L. ASSY (12) are located in the unthreaded-end positions.
2) Align the marks of the LOADING GEAR (15) and the L GEAR PLATE (16).
3) Align the marks of the LOADING PLATE R ASSY (11) and the L GEAR PLATE (16).
4) Check that the LOADING LEVER KASIME (9) has been turned until it is stopped in the direction of the arrow.

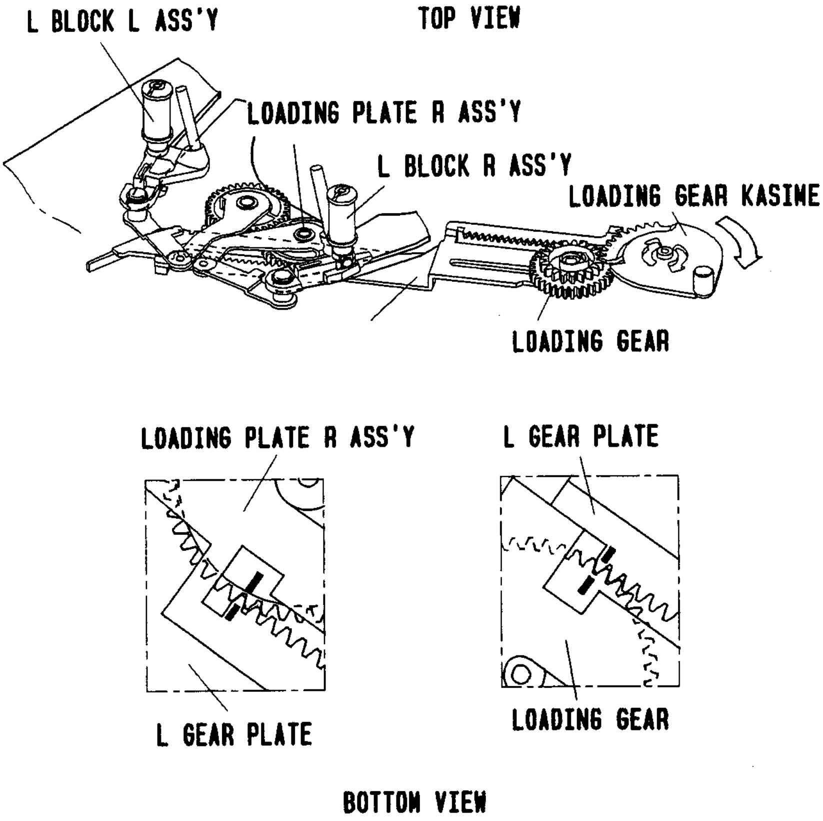

L BLOCK L ASS'Y
TOP VIEW
LOADING PLATE R ASS'Y
L BLOCK R ASS'Y
LOADING GEAR KASIME
LOADING GEAR
LOADING PLATE R ASS'Y
L GEAR PLATE
L GEAR PLATE
LOADING GEAR
BOTTOM VIEW

Fig-1

2. ACE HEAD BASE ASSY

1) Tighten the screw V completely then make adjustment until the asterisk * mark position becomes parallel, while tightening the screw S.

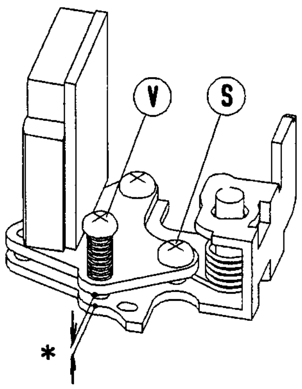


Fig-2

3. RF CLUTCH ASSY

1) Insert the shaft of the RF CLUTCH ASSY (43) next to the M SLIDE PLATE (65).

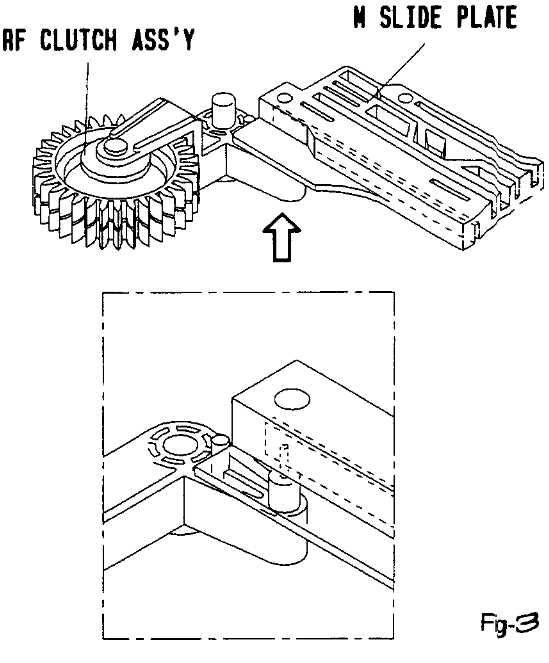

M SLIDE PLATE
RF CLUTCH ASS'Y

Fig-3

4. FL SLIDE PLATE SP

1) Align the marks of the FD GEAR 1 and the FD GEAR 2.

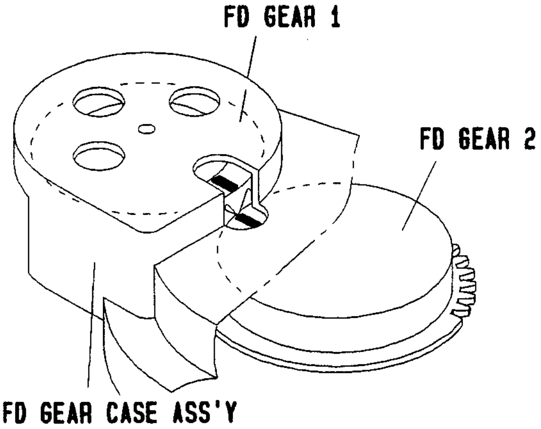

FD GEAR 1
FD GEAR 2
FD GEAR CASE ASS'Y

Fig-4

2) When attaching the FD SLIDE PLATE (68), insert the protrusion parts into the groove as shown in Fig. 5 (1) and (2).

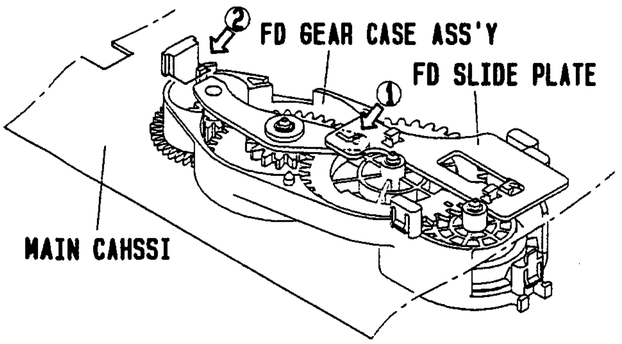

②
FD GEAR CASE ASS'Y
①
FD SLIDE PLATE
MAIN CAHSSI

Fig-5

5. M SLIDE PLATE/M RELAY GEAR/M GEAR PLATE ASSY/M GEAR

1) Align the marks of the M GEAR PLATE ASSY (63) and the M GEAR (62).
2) Attach the M RELAY GEAR (64) while aligning the marks of the M RELAY GEAR (64) and the M SLIDE PLATE (65).

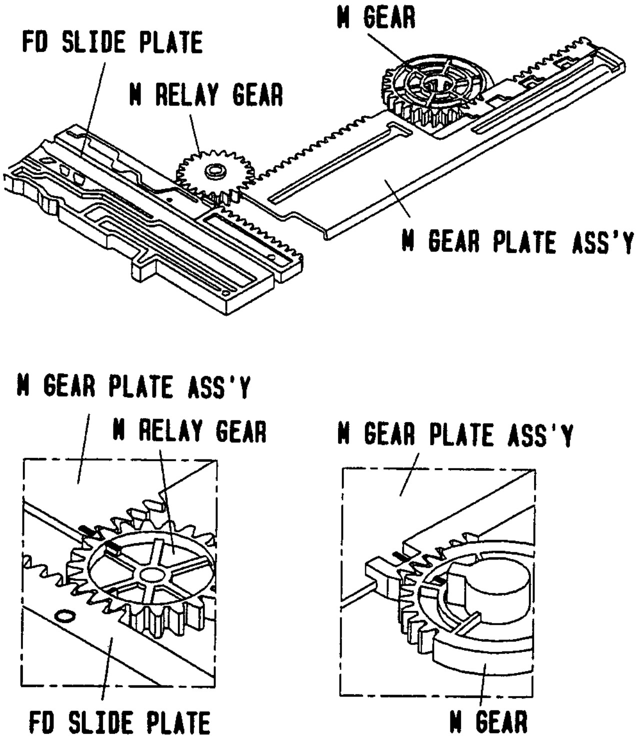

M GEAR
FD SLIDE PLATE
M RELAY GEAR
M GEAR PLATE ASS'Y
M GEAR PLATE ASS'Y
M RELAY GEAR
M GEAR PLATE ASS'Y
FD SLIDE PLATE
M GEAR

Fig-6

6. SUB PLATE ASSY

1) Insert the shaft of the S SOFT BRAKE ARM (56) into the (1) portion of the MAIN CHASSIS.
2) Insert the shaft of the S MAIN BRAKE ASSY (51) to the cam groove (2) portion of the M SLIDE PLATE (65).
3) Insert the shaft of the T SOFT BRAKE ASSY into the 4 portion of the MIN CHASSIS.
4) Insert the shaft of the T MAIN BRAKE ASSY (50) into the (3) portion of the MAIN CHASSIS.
5) Insert the shaft of the REVERSE LEVER PIN (57) into the cam groove (5) portion of the M SLIDE PLATE.

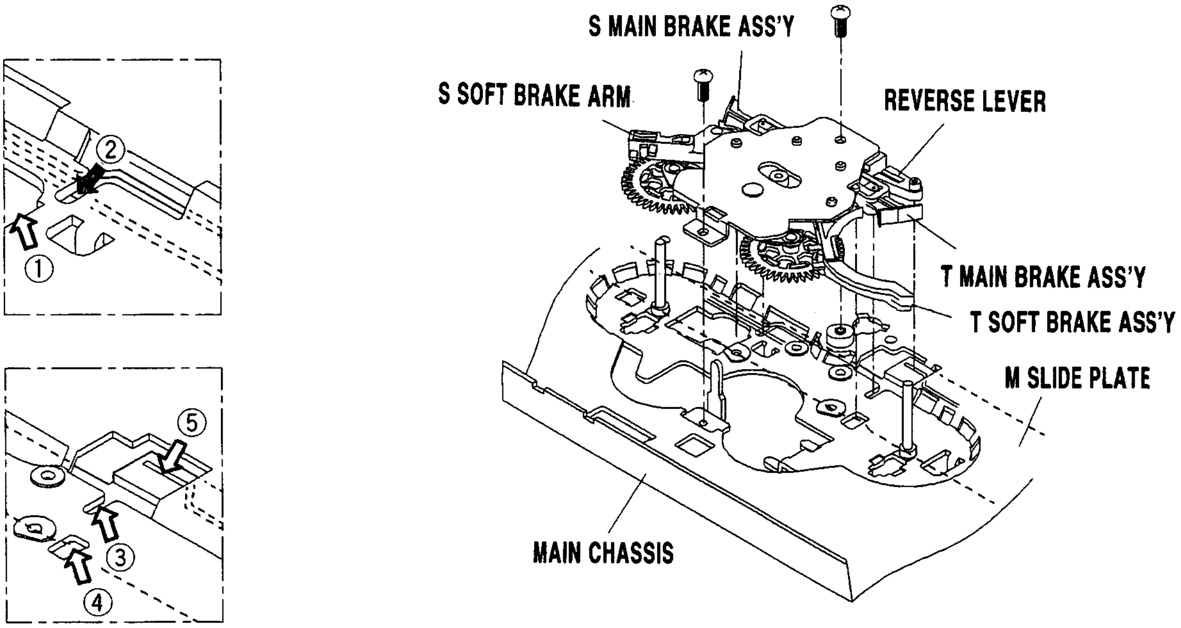

②
①
⑤
③
④
S MAIN BRAKE ASS'Y
S SOFT BRAKE ARM
REVERSE LEVER
T MAIN BRAKE ASS'Y
T SOFT BRAKE ASS'Y
M SLIDE PLATE
MAIN CHASSIS

Fig-7

7. CAM GEAR ASSY and LOADING LEVER KASIME

1) Confirm that the mechanism is in the unthreaded-end state.
2) Attach the CAM GEAR ASSY and LOADING LEVER KASIME so that the post of the LOADING LEVER KASIME (9) is inserted to the rear of the CAM GEAR ASSY (58).

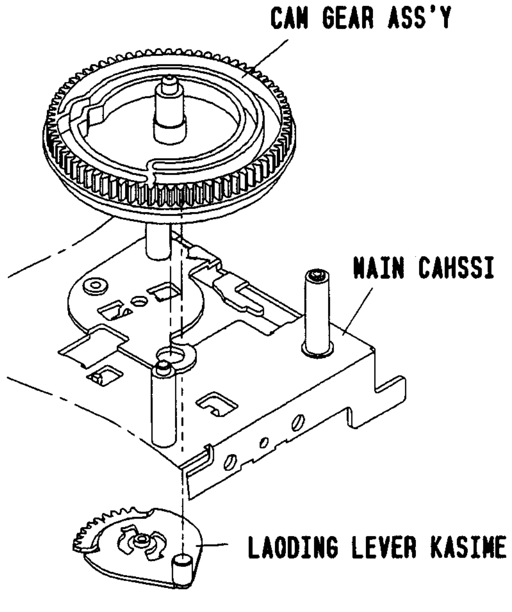

CAM GEAR ASS'Y
MAIN CAHSSI
LAODING LEVER KASIME

Fig-8

8. HEAD CLEANING ASSY

1) The HEAD CLEANING ASSY (20) must be attached so that the lever is positioned in the area marked by the arrow.
(If the lever is attached to the incorrect position, the machine will not work correctly.)

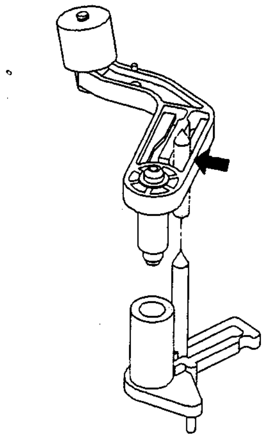


Fig-9

9. FRONT LOADING ASSY

1) Establish the "Cassette In" state of mechanism. Insert the CASSETTE HOLDER ASSY to the FRAME R BLOCK and to the FRAME L BLOCK with the "Cassette In" state of mechanism.

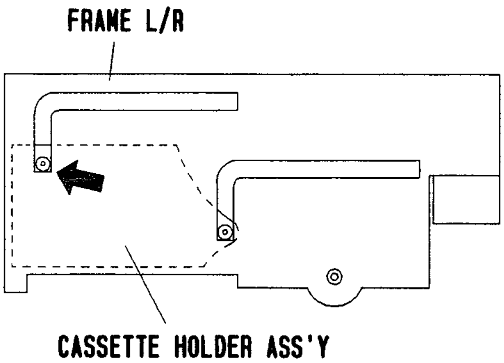


Fig-10

2) Attach the CASSETTE HOLDER ASSY to the FRAME L and the FRAME R.
3) Be careful that the shaft comes to the right of the lever when attaching the CASSETTE HOLDER ASSY.

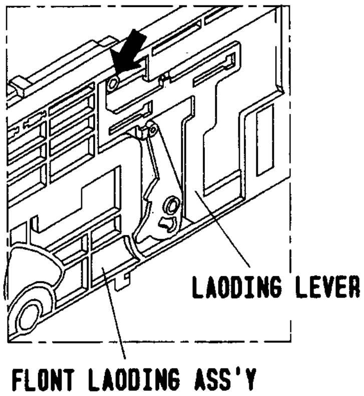


Fig-11

4) Attach the FRONT LOADING ASSY (70) while referring to the FD SLIDE PLATE SP (69) so that the phase of the gear must not be shifted.

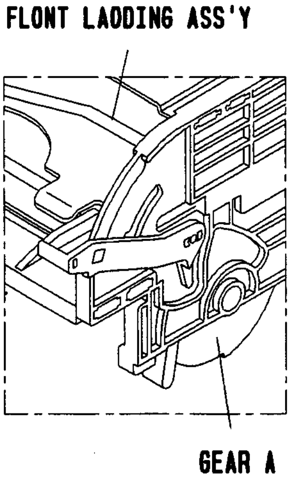


Fig-12

< Note >

When all parts are assembled, perform loading and unloading of the CASSETTE HOLDER ASSY manually by hand. Confirm that the capstan motor rotates as the loading and unloading are performed. If the capstan motor does not rotates, check the phase adjustment referring to section "5. M SLIDE PLATE/M RELAY GEAR/M GEAR PLATE ASSY/M GEAR"

10. Attaching the COM PLATE ASSY

Attach the CAM PLATE ASSY by inserting the respective shafts of the PINCH ROLLER ASSY, CAM GEAR ASSY and HEAD CLEANING ASSY into ⓒ, ⓓ and ⓔ respectively. Then fix it using the 2 screws ⓐ and 4 screws ⓑ. When attaching it, pay attention on the following point.
(Refer to 8. HEAD CLEANING ASSY.)

1) While pressing down the AC HEAD ASSY in the direction of ①, turn it in the direction ② until it stops. (Maintain this position until attachment of the CAM PLATE ASSY is completed.)
2) Turn the CAM GEAR ASSY in the direction of ③ until it stops. (Maintain this position until attachment of the CAM PLATE ASSY is completed.)
3) Spring of the PINCH ROLLER ASSY shown as Ⓑ must enters into the groove of the LEVER shown as Ⓐ.
4) Shaft (opposite side of point Ⓐ) of the LEVER must enter into the groove of the CAM GEAR ASSY as shown in ④.
5) The CAM of the CAM PLATE ASSY must enter into the hole of chassis as shown in ⓕ.

If all of the conditions as described above from step 1) to step 5) are not satisfied, the CAM PLATE ASSY cannot be attached correctly.

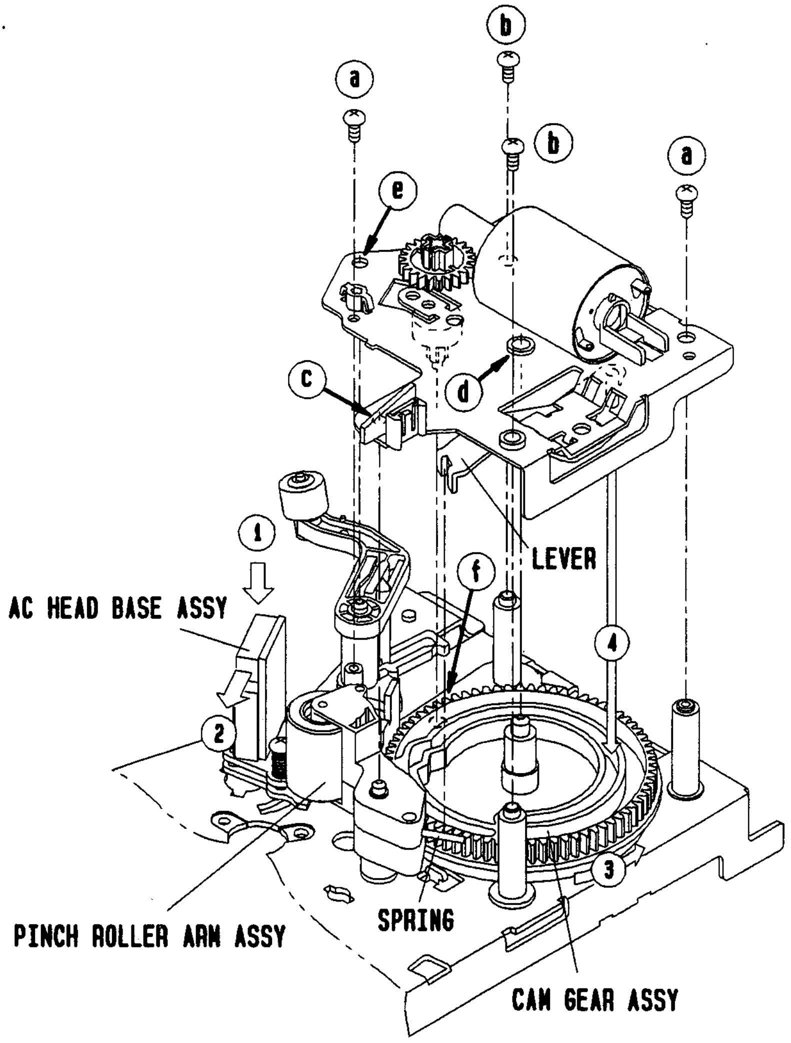


Fig-13

ELECTRICAL ADJUSTMENT

1. TAPE TRANSPORT ADJUSTMENT

1. 粗調整

1) 調整箇所（Fig-1 参照）
   Ⓐ L BLOCK L ASSY
   Ⓑ L BLOCK R ASSY
   Ⓒ TAPE GUIDE ASSY

2) チェック方法
   ① カセットケースのフタを外した生テープを入れ再生する。
   ② Ⓐ～Ⓒの各ガイドのテープ走行中にカールのない事をチェックする。(Fig-2 参照)
   ⒸTAPE GUIDE ASSY にカールがある時は、3項の傾き調整をする。
   テープの下端がドラムリードに沿ってスムーズに走行する事をチェックする。

※ この時、PLAY/STOP を数回繰返しチェックする事。

2. FM エンベロープの調整

1) オシロスコープの接続方法
   CH-1 ...... PBY 信号
   （接続箇所は機種マニュアル参照）
   CH-2 ...... HSW-V (RF SWP)
   （接続箇所は機種マニュアル参照）

※ トリガーは、CH-2、TIME レンジは 5m sec/div にする。

2) 調整方法
   ① トラッキングをマニュアルセンター位置にする。
   ② ⒶL BLOCK L ASSY、ⒷL BLOCK R ASSY が軽く回転する程度にロックビスをゆるめる。(Fig-3 参照)
   ③ FM エンベロープの波形が、平坦になる様、ⒶL BLOCK L ASSY、ⒷL BLOCK R ASSY を調整する。(Fig-4 参照)
   ※ PB、CUE/REV、ポーズを繰り返し、波形がすぐ平坦に復帰する事を確認する。
   ④ FM エンベロープ調整後ロックビスを締める。
   ⑤ ロックビスをネジロックで固定する。

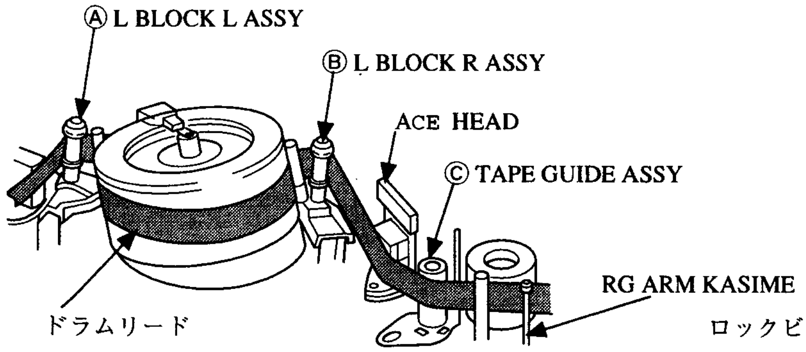
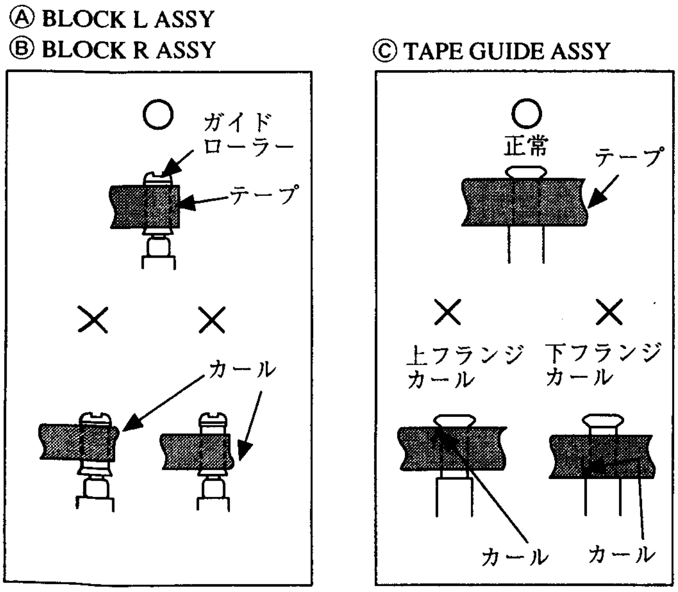

ⒶL BLOCK L ASSY
ⒷL BLOCK R ASSY
ACE HEAD
ⒸTAPE GUIDE ASSY
RG ARM KASIME
ドラムリード

Fig-1


Ⓐ BLOCK L ASSY
Ⓑ BLOCK R ASSY

Ⓒ TAPE GUIDE ASSY
○
ガイドローラー
テープ
×
×
カール
○
正常
テープ
×
×
上フランジカール
下フランジカール
カール
カール

Fig-2

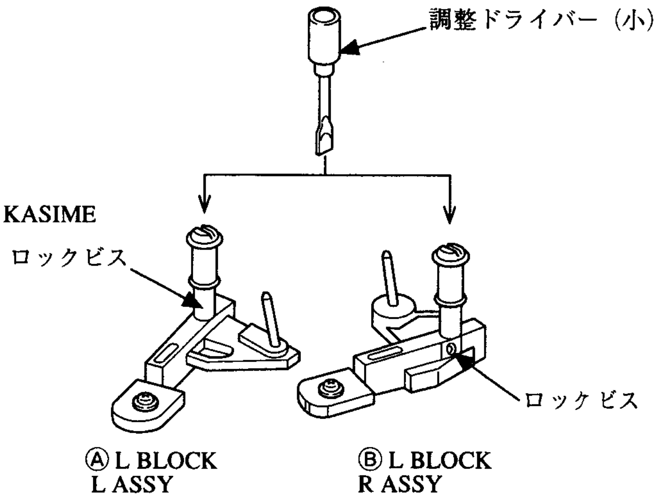

調整ドライバー（小）
ロックビス
ロックビス
ⒶL BLOCK L ASSY
ⒷL BLOCK R ASSY

Fig-3

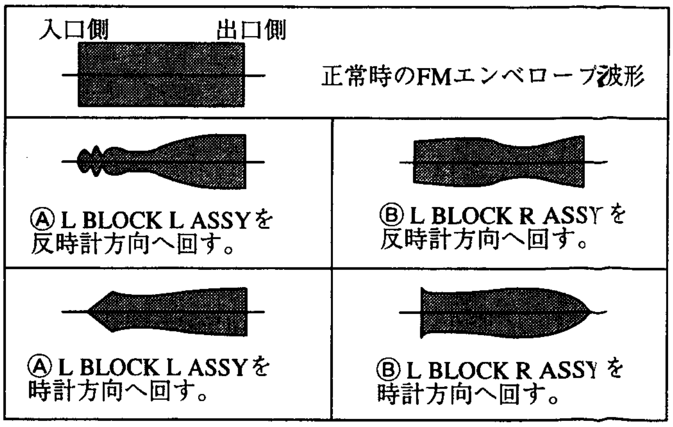

入口側
出口側
正常時のFMエンベロープ波形
ⒶL BLOCK L ASSYを反時計方向へ回す。
ⒷL BLOCK R ASSYを反時計方向へ回す。
ⒶL BLOCK L ASSYを時計方向へ回す。
ⒷL BLOCK R ASSYを時計方向へ回す。

Fig-4

3. ACE ヘッド調整（Fig-5 参照）

1) 傾き調整方法
   ① カセットケースのフタを外した生テープを入れ再生する。
   ② チルト調整ビスを時計方向に回し、Ⓒ TAPE GUIDE ASSY の下フランジにカールをつくる。(Fig-2 参照)
   ③ C TAPE GUIDE ASSY の下フランジにカールがなくなる時点までチルト調整ビスを反時計方向に回す。
2) 高さ調整方法
   ① オシロスコープを AUDIO OUT 端子に接続する。
   ※ TIME レンジは 0.5m sec/div にする。
   ② アライメントテープを再生する。
   ③ 波形が最大になる様、高さ調整ビスを調整する。
3) アジマス調整方法
   ① 高さ調整と同様にオシロスコープを接続する。
   ② アライメントテープを再生する。
   ③ 波形が最大になる様、アジマス調整ビスを調整する。

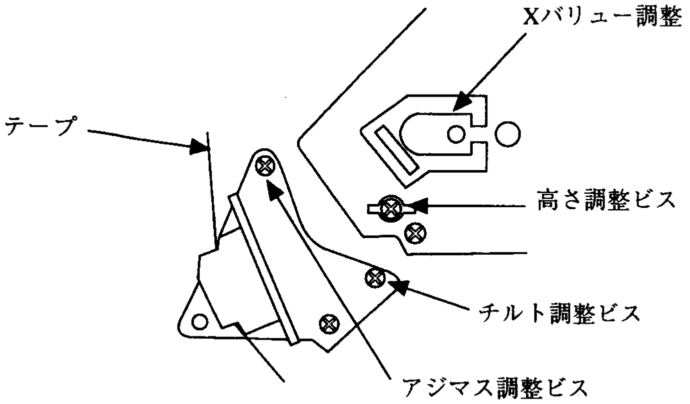

Xバリュー調整
テープ
高さ調整ビス
チルト調整ビス
アジマス調整ビス

Fig-5

4. Xバリュー調整

1) FM エンベロープ調整と同様に、オシロスコープを接続する。
2) 調整方法
   ① トラッキングをマニュアルセンター位置にする。
   ② FM エンベロープ波形が最大になる様、X バリュー調整をする。
   ③ トラッキングボリュームをセンター位置から＋方向もしくは、−方向に可変し、波形が平坦なまま、振幅レベルが下がる事を確認する。

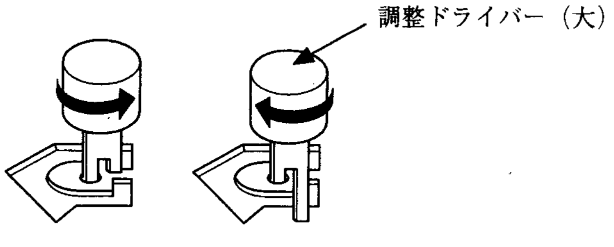


Fig-6

5. RG ポスト高さ調整

1) カセットケースのフタを外した生テープを入れ、REVIEW にする。
2) 調整方法
   ① RG ポスト高さ調整ビスを時計方向に回し、Ⓒ TAPE GUIDE ASSY の下フランジにカールをつくる。(Fig-2、Fig-6 参照)
   ② Ⓒ TAPE GUIDE ASSY の下フランジにカールがなくなる時点まで、RG ポスト高さ調整ビスを反時計方向に回す。
   ※ RG ポストにカールが出来ないところ REVIEW 時、画が縦ゆれしないところに調整する。

6. 確認

1) Ⓐ〜Ⓒの各ガイドにカールがない事を確認する。カールがある時は、2 項 FM エンベロープ調整から繰り返し調整する。
2) 調整終了後ロックビス、チルト調整ビスをネジロックで固定する。

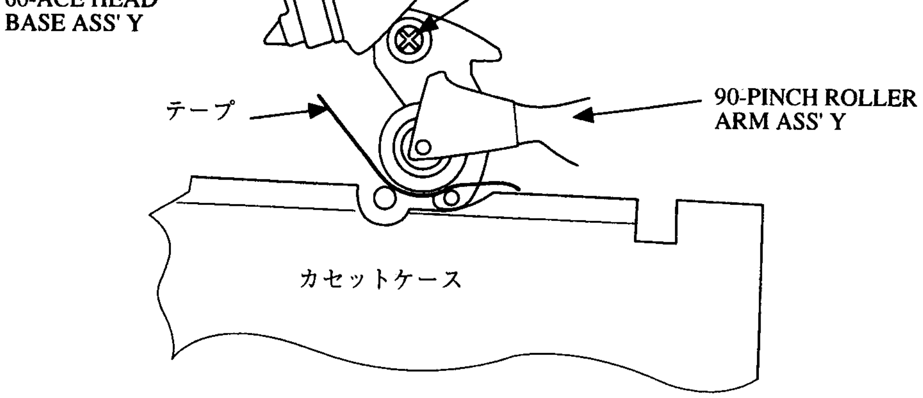

201-RGアジャストナット
60-ACE HEAD BASE ASS' Y
テープ
90-PINCH ROLLER ARM ASS' Y
カセットケース

Fig-7

ELECTRICAL ADJUSTMENT

1. TAPE TRANSPORT ADJUSTMENT

1. Coarse Adjustment

1) Adjustment Points (Refer to Fig-1.)

Ⓐ L BLOCK L ASSY
Ⓑ L BLOCK R ASSY
Ⓒ TAPE GUIDE ASSY

2) Check Procedure

① Prepare a recording tape from which the cassette case lid is removed. Insert the recording tape without cassette lid into the machine and establish the playback mode.

② Check that the tape has no curl at each guide from Ⓐ to Ⓒ when the tape is running. (See Fig-2.)
If tape curl is observed at the TAPE GUIDE ASSY Ⓒ, perform the slant adjustment of step 1) Slantness Adjustment Procedure of the following item 3. ACE HEAD ADJUSTMENT.
Check that bottom edge of the tape runs along with the drum rabbet guide of the drum smoothly.

* Repeat PLAY and STOP modes several times and check the tape curl.

2. FM ENVELOPE ADJUSTMENT

1) Oscilloscope Connection Procedure

CH-1 ...... Connect to the PB Y signal.
(Refer to the Service Manual of individual model for exact connection point.)
CH-2 ...... Connect to the HSW-V (RF SWP) signal.
(Refer to the Service Manual of individual model for exact connection point.)

* Trigger an oscilloscope internally from CH-2 with the TIME range of 5 msec/div.

2) Adjustment Procedure

① Set the Tracking to the MANUAL mechanical center position.

② Loosen the locking screws (referring to Fig-3) until the L BLOCK L ASSY Ⓐ and the L BLOCK R ASSY are gently rotatable.

③ Adjust the L BLOCK L ASSY Ⓐ and the L BLOCK R ASSY until the FM envelope waveform becomes flat. (Refer to Fig-4.)

* Repeat the PB, CUE/REV and PAUSE modes, and confirm that the waveform return to the flat shape immediately.

④ After completing the FM envelope adjustment, tighten the locking screw.

⑤ Apply the Neji-lock to the locking screw.

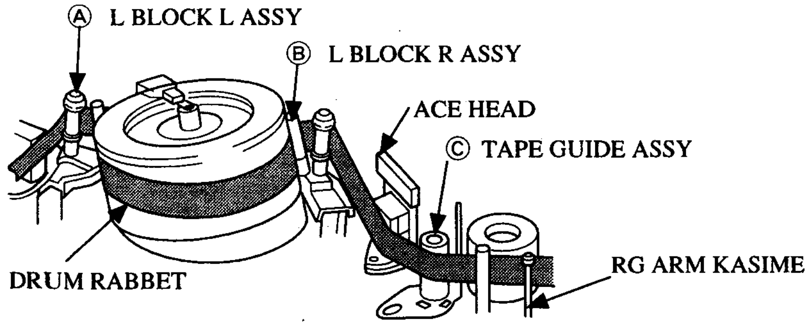

Ⓐ L BLOCK L ASSY
Ⓑ L BLOCK R ASSY
ACE HEAD
Ⓒ TAPE GUIDE ASSY
DRUM RABBET
RG ARM KASIME

Fig-1

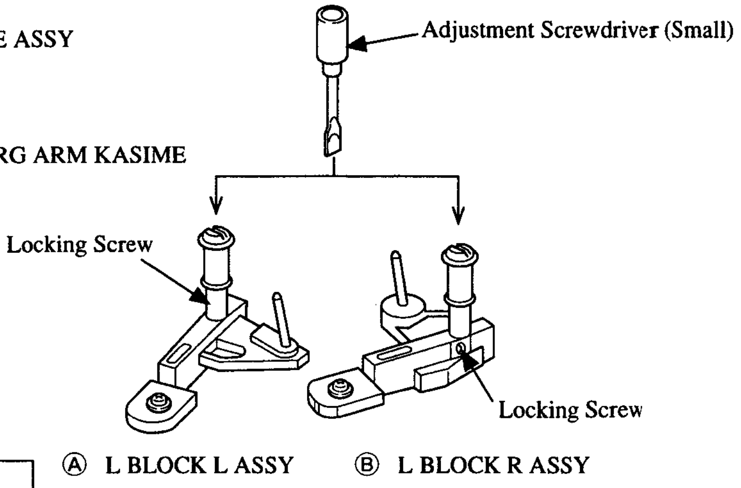

Adjustment Screwdriver (Small)
Locking Screw
Locking Screw
Ⓐ L BLOCK L ASSY
Ⓑ L BLOCK R ASSY

Fig-3

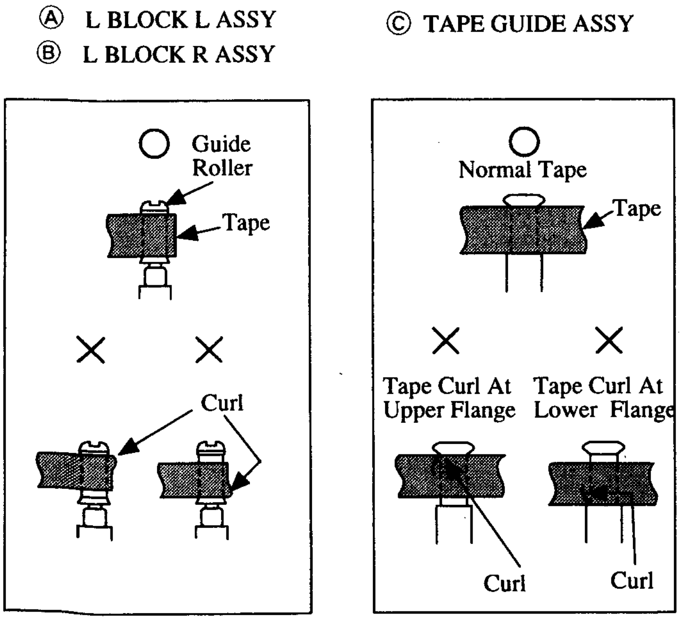

Ⓐ L BLOCK L ASSY
Ⓑ L BLOCK R ASSY
Ⓒ TAPE GUIDE ASSY
○ Guide Roller
Tape
×
×
Curl
○ Normal Tape
Tape
×
×
Tape Curl At Upper Flange
Tape Curl At Lower Flange
Curl
Curl

Fig-2

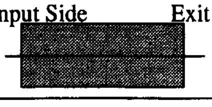
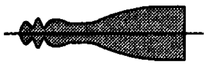
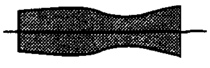
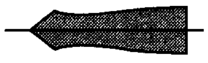
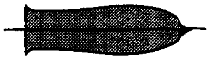
Input Side Exit Side  FM envelope waveform when the machine is correctly adjusted.	
 Turn the ⒶL BLOCK L ASSY counter-clockwise.	 Turn the ⒷL BLOCK R ASSY counter-clockwise.
 Turn the ⒶL BLOCK L ASSY clockwise.	 Turn the ⒷL BLOCK R ASSY clockwise.

Fig-4

3. ACE HEAD ADJUSTMENT (Refer to Fig-5.)

1) Slantness Adjustment Procedure
   - ① Insert the recording tape without cassette lid, into the machine and establish the playback mode.
   - ② Turn the tilt adjustment screw clockwise until tape curl is generated at the lower flange of the TAPE GUIDE ASSY Ⓒ. (Refer to Fig-2.)
   - ③ Turn the tilt adjustment screw counter-clockwise until tape curl disappears at the lower flange of the TAPE GUIDE ASSY Ⓒ.
2) Height Adjustment Procedure
   - ① Connect an oscilloscope to the AUDIO OUT terminal.
   - * Set the TIME range of an oscilloscope to 5 msec/div.
   - ② Playback the alignment tape.
   - ③ Adjust the height adjustment screw until the waveform has the maximum amplitude.
3) Azimuth Adjustment Procedure
   - ① Connect an oscilloscope in the same way as the previous item "2) Height Adjustment Procedure".
   - ② Playback the alignment tape.
   - ③ Adjust the height adjustment screw until the waveform has the maximum amplitude.

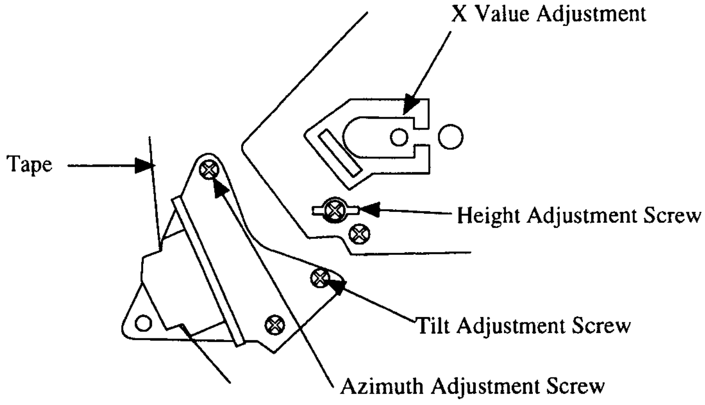


Fig-5

4. X VALUE ADJUSTMENT

1) Connect an oscilloscope in the same way as the previous section "2. FM ENVELOPE ADJUSTMENT".
2) Adjustment Procedure
   - ① Set the Tracking to the MANUAL mechanical center position.
   - ② Adjust the X value adjustment point until the FM envelope waveform has the maximum amplitude.
   - ③ Turn the Tracking volume control in the direction of either "+" or "-" from the mechanical center position, and confirm that amplitude of the waveform decreases while maintaining the flat wave shape.

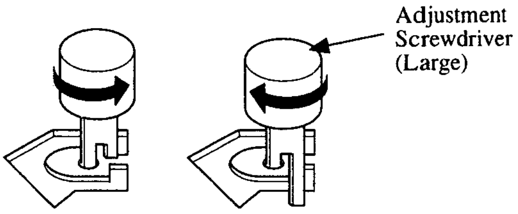


Fig-6

5. RG POST HEIGHT ADJUSTMENT

1) Insert the recording tape without cassette lid, into the machine and establish the REVIEW mode.
2) Adjustment Procedure
   - ① Turn the RG post height adjustment screw clockwise until tape curl is generated at the lower flange of the TAPE GUIDE ASSY Ⓒ. (Refer to Fig-2 and Fig-6.)
   - ② Turn the RG post height adjustment screw counter-clockwise until tape curl disappears at the lower flange of the TAPE GUIDE ASSY Ⓒ.
   - * When performing this adjustment, find the adjustment point where tape curl disappears and the playback picture does not have vertical shaking during REVIEW mode.

6. CHECK

1) Check that there is no tape curl at the respective tape guides from Ⓐ to Ⓒ. If tape curl is observed, repeat adjustment starting from the section "2. FM ENVELOPE ADJUSTMENT".
2) Apply the Neji-lock to the locking screw and tilt adjustment screw.

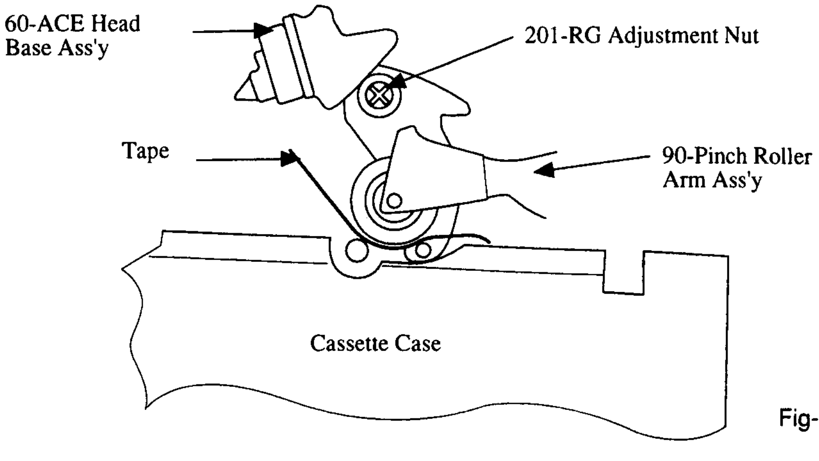


Fig-7

サービス技術ニュース	
番号	連絡内容
G－　　－	
G－　　－	
G－　　－	

アイワ株式会社
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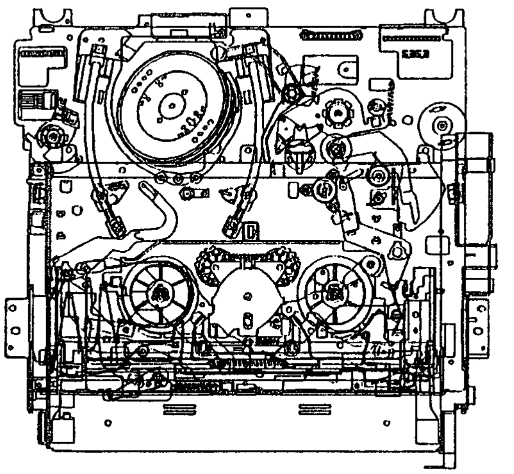
Printed by: Schaltungsdienst Lange, Berlin (GERMANY)

aiwa

aiwa
SERVICE

TN-6500



VIDEO MECHANISM

•TYPE: English, Japanese

◎This Service Manual has information about difference between TN-6500 111/211/212/213/218/219 and TN-6500 107/108/109/110/206/208. If requiring the other information, see Service Manual of TN-6500. (S/M Code No. 09-95B-115-90T).

◎このサービスマニュアル TN-6500 111/211/212/213/218/219は、TN-6500 107/108/109/110/206/208との変更部分のみを載せます。共通部分については、S/M Code No. 09-95B-115-90Tを参照して下さい。

BASIC NAME	DERIVATION						
	NO.	NAME					
TN-6500	A	109	110	111			
	B	107	108				
	C	211 (206)	213 (209)	218			
	D	212 (208)	219				

◎For different versions of mechanism that may be introduced since the issue of this manual, only the new or modified points will be discussed.

◎本サービスマニュアル発行後の派生メカニズムは 新規作成、相違点のみ発行します。

SERVICE MANUAL

S/M Code No. 09-967-146-70T

VCR TEST TAPE INTERCHANGEABILITY TABLE

新しいタイプのテストテープは、CH-1 (NTSC用) とCH-2 (PAL用) の2種類があります。それぞれのテープには、(1) ～ (4) で区別する4種類の信号が、次の順番と時間で記録されています。
There are two types of the new allgnment tape CH-1B (for NTSC) and CH-2 (for PAL) . On each tape four signals (1) - (4) are recorded for the times and in the order shown below.

(1) : 8min. → (2) : 2min. → (3) : 5min. → (4) : 5min.

TTV-MP1 (M-PAL用) ,TTV-MS1 (MESECAM用) ,TTV-S1 (SECAM用) については現行通りです。
The TTV-MP1 (for M-PAL) ,TTV-MS1 (for MESECAM) and TTV-S1 (for SECAM) allgnment tapes have the same contents as the previous tapes.

方式 Method	現行タイプ Now in use TYPE		新タイプ New Type		主な用途 Application
	テープ名 Model	記録内容 ※1 Contents ※1	テープ名 Model	記録内容 ※1 Contents ※1	
NTSC	TTV-N1	NTSC,Color, 1kHz,SP	CH-1B(2)	NTSC,Stairsteps, 1kHz,SP	PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 PB-Y Level/General electrical ADJ.Head ACE Height/Tilt ADJ.
	TTV-N1E	NTSC,Color, 1kHz,EP	CH-1B(4) ※2	NTSC,Color,1kHz, EP	ｽｲｯﾁﾝｸﾞ位置調整。 Switching position ADJ.
	TTV-N2	NTSC,Stairsteps, 7kHz,SP	CH-1B(1)	NTSC,Stairsteps, 7kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。ｽｰﾊﾟｰｸﾘｱｰﾋﾟｸﾁｬｰのﾚﾍﾞﾙ調整。 Head ACE Azimuth ADJ.
	TTV-N12 (SCV-1998)	NTSC,Color, 1kHz,SP	CH-1B(4)	NTSC,Color,1kHz, EP	FMｴﾝﾍﾞﾛｰﾌﾟ調整。Xﾊﾞﾘｭｰ(位相)調整。 FM Envelope ADJ. X-Value ADJ.
	TTV-N7A	NTSC,Stairsteps, 1kHz,SP,HiFi400Hz	CH-1B(3)	NTSC,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
PAL	TTV-P1	PAL,Color, 1kHz,SP	CH-2(2) ※3	PAL,Stairsteps, 1kHz,SP	ｽｲｯﾁﾝｸﾞ位置調整。(SP専用ﾓﾃﾞﾙ)PB-Yﾚﾍﾞﾙ調整等の一般電気調整。ACEﾍｯﾄﾞの高さ/傾き調整。 Switching position ADJ. PB-Y Level/General electrical ADJ. Head ACE Height/Tilt ADJ.
	TTV-P1L	PAL,Color, 1kHz,LP	CH-2(4)	PAL,Color,1kHz, LP	ｽｲｯﾁﾝｸﾞ位置調整。(LP対応ﾓﾃﾞﾙ)FMｴﾝﾍﾞﾛｰﾌﾟ調整。(LP対応ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(LP対応ﾓﾃﾞﾙ) Switching position.(LP Model)FM Envelope ADJ. (LP Model)X-Value ADJ.(LP Model)
	TTV-P2	PAL,Stairsteps, 6kHz,SP	CH-2(1)	PAL,Stairsteps, 6kHz,SP	ACEﾍｯﾄﾞのｱｼﾞﾏｽ調整。FMｴﾝﾍﾞﾛｰﾌﾟ調整。(SP専用ﾓﾃﾞﾙ) Xﾊﾞﾘｭｰ(位相)調整。(SP専用ﾓﾃﾞﾙ) Head ACE Azimuth ADJ. FM Envelope ADJ.(SP Model) X-Value ADJ.(SP Model)
	TTV-P7	PAL,Stairsteps, 1kHz,SP,HiFi 1kHz	CH-2(3)	PAL,Color,No sound SP,HiFi400Hz	HiFiｵｰﾃﾞｨｵ再生ﾚﾍﾞﾙ調整。 HiFi Audio PB Level ADJ.
	TTV-P16	PAL,Color, 400Hz,SP,HiFi 1kHz	変更なし No Changed.		FMﾌｨﾙﾀｰ調整 FM Filter ADJ.

※ 1. ｶﾗｰ方式→映像信号→ﾉｰﾏﾙ音声→ﾃｰﾌﾟｽﾋﾟｰﾄﾞ→HiFi音声 の順で記載されています。
※ 1. Described in the order of color format. video signal. linear audio. tape speed and Hi-Fi audio.
※ 2. SP専用ﾓﾃﾞﾙの場合は、CH-1B の (1) ～ (3) を使用して下さい。
※ 2.Use CH-1B (1) - (3) with models used exclusively in the SP mode.
※ 3. 色信号の観測が必要な場合はCH-2の (3) または (4) を使用して下さい。
※ 3.Use CH-2 (3) and (4) when it is necessary to observe the chroma signal.

STANDARD MAINTENANCE

1. SERVICE SCHEDULE

○：チェック　●：交換

デッキ			定期サービス表			
BLOCK NAME	Ref. No.	部品名	1000h	2000h	3000h	4000h
	110	TENSION ARM ASS' Y		●		●
	80, 81	T.S REEL ASS' Y			●	
	120	SUB PLATE ASS' Y		●		●
	142	LOADING MOTOR ASS' Y			●	
	100	CAPSTAN MOTOR		●		●
	90	PINCH ROLLER ARM ASS' Y		●		●
	123	RF CLUTCH ASS' Y		●		●
	61	ACE HEAD HVMZA1220			●	
	66	FE HEAD BASE ASS' Y			●	
	5	DRUM EARTH ASS' Y			●	
	1	CYLINDAR ASS' Y	○	●	○	●

注意：

- テープ走行系のすべての部品を清掃し、清掃後はデッキ調整すべてを行なうこと。
  ビデオヘッド/ピンチローラ/ACEヘッド/フルイレーズヘッド

2. CLEANING

1. ビデオヘッドの清掃（Fig-1 参照）

1) スチールキャビネットをはずす。
2) 素手でアッパードラムやロワードラムに触れぬ様手袋（薄いもの）をする。
3) ヘッドクリーニング用クロス又はセーム（鹿）皮にアルコールを2、3滴つけ、ヘッドチップに軽くあててアッパードラムを反時計方向に回す。

注意

- ビデオヘッドは非常に硬い物質でできていますが、非常に薄いため、縦方向に清掃するのは避けて下さい。
- 清掃した箇所が乾くまでセットを作動しないで下さい。
- 汚れたヘッドクリーニング用クロス又はセーム（鹿）皮は再使用しないで下さい。

2. ACヘッドのクリーニング（Fig-2 参照）

1) スチールキャビネットを外す。
2) ヘッドクリーニング用クロス又はセーム（鹿）皮にアルコールを2、3滴つけて、アッパードラムや他の走行系部品を痛めない様注意しながら、クリーニングする。

注意

- ACヘッドを縦方向にクリーニングしないで下さい。
- クリーニングした箇所が乾くまでセットを作動しないで下さい。

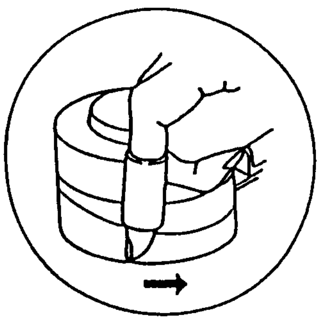


Fig-1

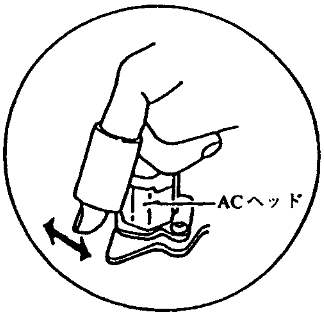


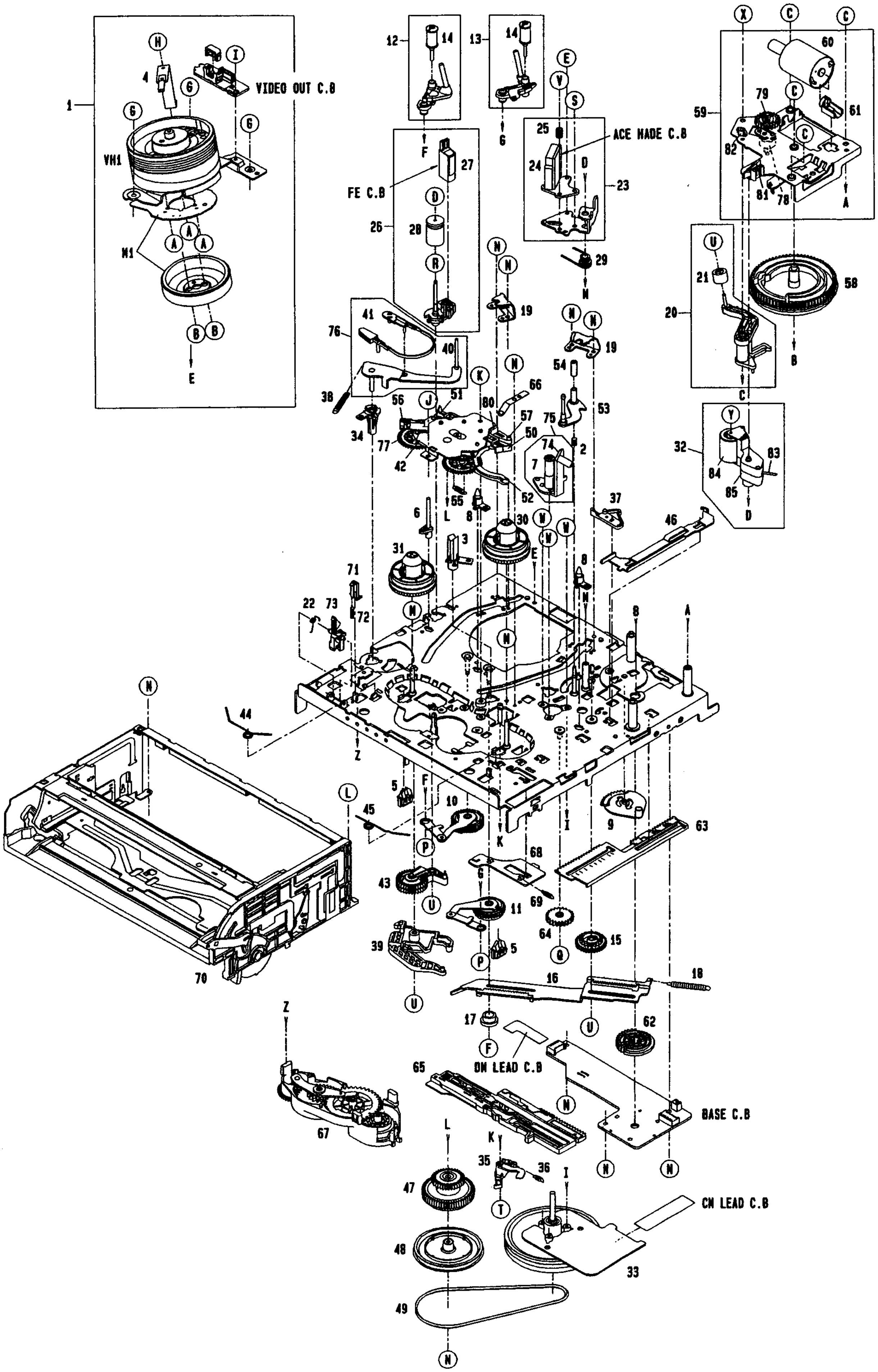
Fig-2

DISASSEMBLY PARTS LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	S8-067-017-060	--	CYLINDAR ASS'Y<208>
1	S8-066-016-030	--	CYLINDAR ASS'Y<109>
1	S8-066-016-010	--	CYLINDAR ASS'Y<107,108>
1	S8-066-016-080	--	CYLINDAR ASS'Y<110>
1	S8-065-017-010	--	CYLINDAR ASS'Y<206,219>
1	S8-065-016-090	--	CYLINDAR ASS'Y<111>
1	S8-065-017-070	--	CYLINDAR ASS'Y<213,211>
1	S8-065-017-080	--	CYLINDAR ASS'Y<212>
1	S8-065-017-110	--	CYLINDAR ASS'Y<218>
2	S8-065-170-050	--	RG ARM SPRING<EXCEPT 107,108,109 206>
3	S8-065-130-010	--	OPTICAL LEADER
4	S8-065-015-010	--	DRUM EARTH ASS'Y
5	S8-065-133-030	--	RS LEADER
6	S8-065-023-010	--	F POST METAL ASS'Y
7	S8-065-023-020	--	TAPE GUIDE ASS'Y<107,108,109,110 206,208>
7	S8-065-023-040	--	TAPE GUIDE ASS'Y<213,111,211,219 212,218>
8	S8-063-020-230	0E	CASSETE GUIDE BOSS
9	S8-065-035-020	--	LOADING LEVER KASIME
10	S8-063-033-050	2A	LOADING PLATE L ASS'Y
11	S8-065-033-050	--	LOADING PLATE R ASS'Y
12	S8-065-033-030	--	L BLOCK L ASS'Y
13	S8-065-033-040	--	L BLOCK R ASS'Y
14	S8-063-030-090	2A	ROLLER POST
15	S8-065-030-040	--	LOADING GEAR
16	S8-065-030-050	--	L GEAR PLATE
17	S8-065-030-110	--	L GEAR PLATE COLLOR
18	S8-065-030-100	--	L GEAR PLATE SPRING
19	S8-065-030-010	--	LD CATCHER
20	S8-065-033-060	--	HEAD CLEANING ASS'Y
21	S8-063-030-290	--	CLEANING ROLLER ASS'Y
22	S8-065-130-050	--	REC LEVER SPRING<EXCEPT 107,206 211>
23	S8-065-043-030	--	AC HEAD BASE ASS'Y<107,206,211>
23	S8-065-043-020	--	ACE HEAD BASE ASS'Y<EXCEPT 107 206,211>
24	S6-204-030-240	--	AC HEAD HVMZB1030<107,206,211>
24	S6-204-150-200	--	ACE HEAD HVMZA1220<EXCEPT 107 206,211>
25	S8-000-060-040	0E	AZIMUTH SPRING
26	S8-065-043-010	--	FE HEAD BASE ASS'Y
27	S6-209-150-040	--	VTR1X2ERS11107<EXCEPT 107,206 211>
28	S8-063-043-060	--	IMPEDANCE ROLLER ASS'Y
29	S8-065-040-020	--	HEAD BASE SPRING
30	S8-065-053-010	--	T REEL ASS'Y
31	S8-065-053-020	--	S REEL ASS'Y
32	S8-065-063-010	--	PINCH ROLLER ARM ASS'Y
33	S6-003-030-600	--	CAPSTAN MOTOR F2QTB10 (M2)
34	S8-063-080-040	1A	BT ARM METAL
35	S8-065-073-010	--	C BRAKE ASS'Y
36	S8-065-070-020	--	C BRAKE SPRING
37	S8-065-170-040	--	RG LEVER
38	S8-065-080-020	--	BT SPRING
39	S8-065-080-060	--	BT LEVER
40	S8-065-083-020	--	TENSION ARM SEMI ASS'Y
41	S8-065-083-030	--	BT BAND ASS'Y
42	S8-065-093-030	--	SUB PLATE ASS'Y
43	S8-065-093-040	--	RF CLUTCH ASS'Y
44	S8-065-100-070	--	TS BRAKE SPRING
45	S8-065-100-090	--	SS BRAKE SPRING
46	S8-065-100-100	--	TS BRAKE LEVER
47	S8-065-093-020	--	CLUTCH ASS'Y
48	S8-065-093-010	--	CLUTCH PULLY ASS'Y
49	S8-065-090-200	--	DRIVE BELT
50	S8-065-103-010	--	T MAIN BRAKE ASS'Y
51	S8-065-103-020	--	S MAIN BRAKE ASS'Y
52	S8-065-103-030	--	T SOFT BRAKE ASS'Y
53	S8-065-175-010	--	RG ARM KASIME
54	S8-065-170-030	--	RG ADJUST NUT
55	S8-065-100-050	--	MAIN BRAKE SPRING
56	S8-065-100-080	--	S SOFT BRAKE ARM
57	S8-065-110-140	--	REVERSE LEVER PIN
58	S8-065-113-020	--	CAM GEAR ASS'Y
59	S8-065-113-010	--	CAM PLATE ASS'Y
60	S8-065-113-030	--	LOADING MOTOR ASS'Y(M3)
61	S8-065-110-110	--	MOTOR HOLDER
62	S8-065-110-040	--	M GEAR
63	S8-065-113-050	--	M GEAR PLATE ASS'Y
64	S8-065-110-070	--	M RELAY GEAR
65	S8-065-110-080	--	M SLIDE PLATE
66	S8-065-110-170	--	R LEVER SPRING PLATE
67	S8-065-153-010	--	FD GEAR CASE ASS'Y
68	S8-065-150-090	--	FD SLIDE PLATE
69	S8-065-150-100	--	FD SLIDE PLATE SP
70	S8-065-163-010	--	FRONT LOADING ASS'Y
71	S8-065-130-060	--	IN SWITCH SLIDER
72	S8-065-130-070	--	IN SW SLIDER SPRING
73	S8-065-130-040	--	REC SWITCH LEVER<EXCEPT 107,206 211>
74	S8-065-020-210	--	TAPE PROTECT<213,111,211,219,212 218>
75	S8-065-023-030	--	TAPE GUIDE BASE ASS'Y<213,111,211 219,212,218>
76	S8-065-083-010	--	TENSION ARM ASS'Y
77	S8-065-093-070	--	GEAR PLATE ASS'Y
78	S8-065-110-030	--	CAM DRIVE GEAR
79	S8-065-110-100	--	WORM WHEEL
80	S8-065-110-130	--	REVERS LEVER
81	S8-065-110-150	--	OPEN ANGLE
82	S8-065-110-160	--	AH ADJUST NUT
83	S8-065-060-040	--	PINCH ROLLER SPRING<213,111,211 219,212,218>
84	S8-065-060-050	--	PINCH ROLLER<213,111,211,219,212 218>
85	S8-065-065-010	--	PINCH ROLLER KASIME<213,111,211 219,212,218>
A	S9 P02-261-510	--	TAMS SCREW 2.6X15
B	S8 065-013-150	--	ROTOR SCREW B ASS'Y
C	S9-P02-260-510	0E	TAMS SCREW 2.6X5
D	S9-W02-300-500	0E	POLTSIDER WASHER1.6X3.8X0.3
E	S9-P09-300-610	0E	SCREW (SHARP-POINTED) 3X6
F	S9-W02-300-600	0E	POLYSLIDER WASHER2.1X5X0.5
G	S9-P04-300-510	0E	TAPPING SCREW 3.0X5
H	S9-P04-260-410	0E	TAPPING SCREW 2.6X4
I	S9-P12-260-640	0E	TAMS SCREW (TAPPING) S 2.6X6
J	S9-C04-265-030	0E	CAMERA SCREW(TAPPING)S 2.6X5
K	S9 P04-200-410	--	TAPPING SCREW 2.0X4
L	S9-B03-260-510	0E	TAPPING SCREW(BIND) 2.6X5
M	S9-W03-301-100	0E	NYLON WASHER 2.5X5X0.3
N	S9-P04-260-510	0E	TAPPING SCREW 2.6X5
P	S9-W06-501-100	0E	HL WASHER(CUT)4.5X7X0.5
Q	S9-W06-301-000	--	HLW(C) 2.6X6X0.3
R	S9-W06-300-400	0E	HL WASHER(CUT) 1.55X4.5X0.3
S	S9-P01-260-720	0E	SCREW 2.6X7
T	S9-W02-501-000	0E	POLYSLIDER WASHER2.1X5X0.5
U	S9-W02-501-100	0E	POLYSLIDER WASHER2.6X6X0.5
V	S8-000-060-260	0E	AZIMATH SPRING SCREW
W	S9-P07-260-610	--	TAPPING SCREW P 2.6 X 6
X	S9-F22-260-810	--	ADJUST SCREW 2.6X8
Y	S9-B01-260-410	--	SCREW,BIND 2.6-4<213,111,211,219 212,218>

EXPLODED VIEW



VIDEO OUT C.B
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FE C.B
ACE HADE C.B
DN LEAD C.B
BASE C.B
CN LEAD C.B
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HOW TO ASSEMBLE THE PARTS

1. L GEAR PLATE

L GEAR PLATE (16) の取付けの際は以下 1) ～ 4) に注意すること。

1) L BLOCK R ASSY (13) と L BLOCK L ASSY (12) がアンスレッディング状態であること。
2) LOADING GEAR (15) と L GEAR PLATE (16) のマークを合わせる。
3) LOADING PLATE R ASSY (11) と L GEAR PLATE (16) のマークを合わせる。
4) LOADING LEVER KASIME (9) が矢印方向に止まるまで回転していること。

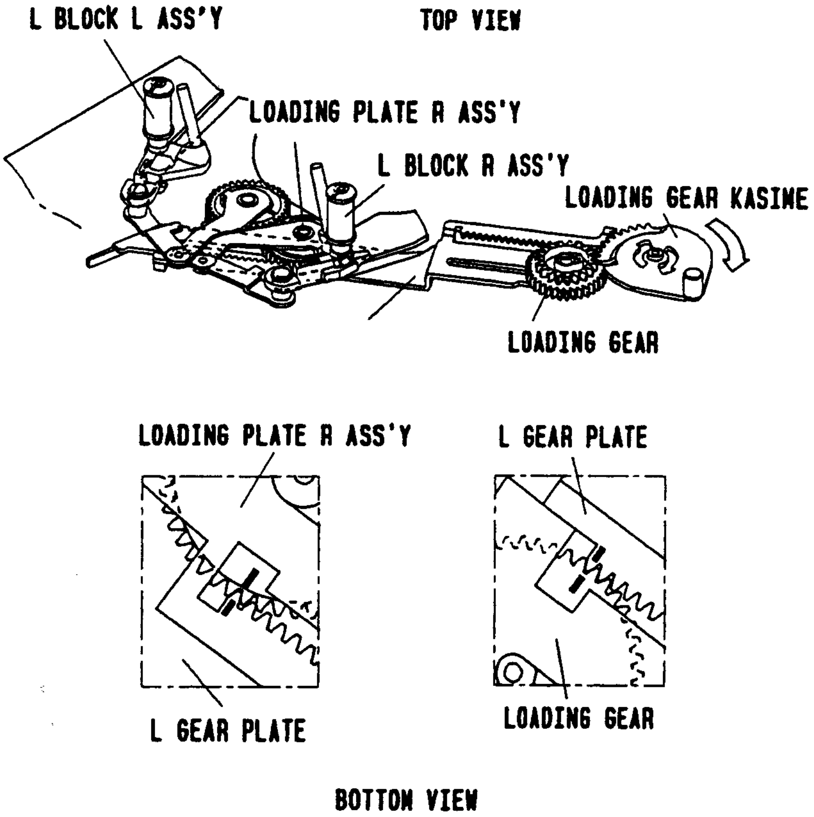

L BLOCK L ASS'Y
TOP VIEW
LOADING PLATE R ASS'Y
L BLOCK R ASS'Y
LOADING GEAR KASIME
LOADING GEAR
LOADING PLATE R ASS'Y
L GEAR PLATE
L GEAR PLATE
LOADING GEAR
BOTTON VIEW

Fig-1

2. ACE HEAD BASE ASSY

1) ビスⓋを完全に締めつけ、※部が平行になるようにビスⓈを締めながら調整する。

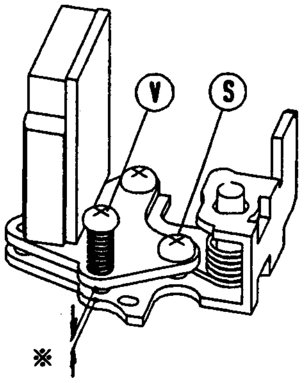


Fig-2

3. RF CLUTCH ASSY

1) M SLIDE PLATE (65) の構に RF CLUTCH ASSY (43) のシャフトを入れる。

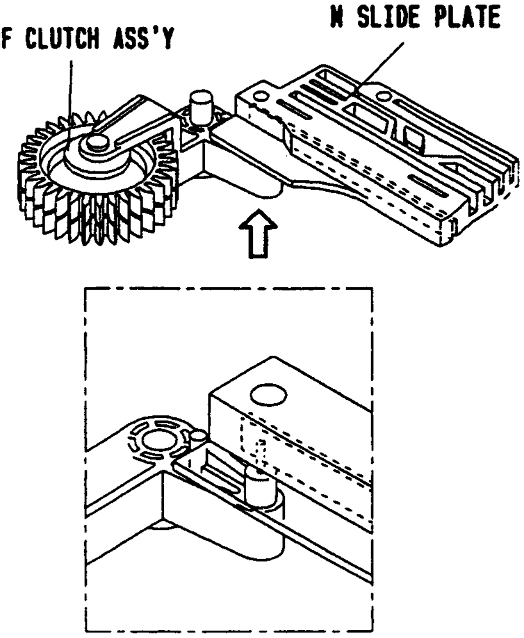
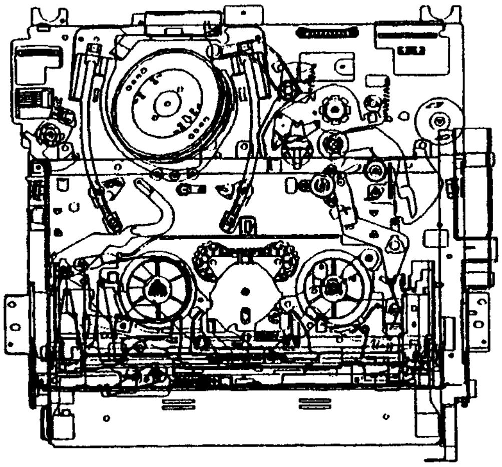

M SLIDE PLATE
RF CLUTCH ASS'Y

Fig-3

TN-6500



VIDEO MECHANISM

• TYPE: English

SERVICE MANUAL

SUPPLEMENT

BASIC NAME	DERIVATION				
	NO.	NAME			
TN-6500	A				
	B	232			
	C				
	D				

This Service Manual has information about difference between TN-6500 232 and tn-6500 117. If reguiring the other information,see Service Manual of TN-6500.(S/M Code No.09-977-210-30T)

S/M Code No. 09-987-279-50T

MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S8-065-017-200		CYLINDAR ASSY				
27	S6-204-150-180		FE HEAD HVFHG0003				
33	S6-003-030-690		CAPSTAN MOTOR(F3QTB14)				
86	S8-065-013-010		V OUT PWB ASSY				
91(M1)	S8-065-013-160		DRUM MOTOR ASSY(M1)				

サービス技術ニュース	
番号	連絡内容
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G─ ─	
G─ ─	

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Tokyo Japan

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